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Rockwell

THE

IMPROVED SYSTEM

OF

Educating the Horse

BY

A. H. ROCKWELL,

ORIGINATOR OF THE MODE OF

DRIVING WITHOUT REINS.

CONTAINING A HISTORY OF HIS FAMOUS HORSES, A TREATISE UPON DISEASES OF THE HORSE, &c., &c.

ILLUSTRATED WITH 20 FULL-PAGE ENGRAVINGS.

New York:

F. O. FISHER, PRINTER, 17 & 19 ROSE STREET.

1877.

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2. Ok

Horse-

Yours respectfully
D. H. Rockwell

THE

IMPROVED PRACTICAL SYSTEM

OF

EDUCATING THE HORSE;

BY

ROCKWELL & HURLBURT,

ORIGINATORS OF THE MODE OF

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ILLUSTRATED WITH TWENTY-FIVE FULL-PAGE ENGRAVINGS.

With a History of their famous Horses, "TIGER," "STAR," and "MAZEPPA."

ALSO, A

TREATISE ON SHOEING.

TOGETHER WITH AN ACCOUNT OF

DISEASES AND THEIR TREATMENT,

WITH NEW AND VALUABLE RECIPES.

ALSO, A STATEMENT OF THEIR

METHOD OF TRAINING CATTLE AND DOGS.

TOGETHER WITH THE

RULES OF AMERICAN TROTTING ASSOCIATION.

New York:

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Waters Sc. N.Y.

PREFACE.

THE author of this work has prepared it for the purpose of correcting many erroneous notions which now prevail in the care and management of Horses, as well as to place in the hands of those interested a valuable Instructor. Embracing as it does all of my theories and practices, together with a history of an experience of twelve years in the business of Training Horses, it can not fail of being a valuable assistant to those who feel an interest in the education of this noble animal.

In the previous editions of this work there are many points which experience has taught me are incorrect and in this issue I labor to remove all such erroneous impressions.

I also add, what has not heretofore been published, a history of all Horses now on exhibition throughout the country, which are being driven without reins—the system being entirely original with myself.

My treatment of Diseases, new Recipes, and Training of Cattle and Dogs, is peculiar to myself, and I hope to make them useful to the reader.

The account of Diseases and their Treatment may be relied upon, being the result of personal experience and actual test and observation.

The Author of this Book is

A. H. ROCKWELL,
Of *Binghamton*,
Broome Co., N. Y.

By remitting $1 by letter to the above address, a copy will be forwarded to your address immediately. Don't forget to write your name and address plain.

A. H. R.

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HISTORY OF THE FAMOUS HORSES

"TIGER," "STAR," AND "MAZEPPA,"

AND OTHER

HORSES DRIVEN WITHOUT REINS.

Most of our early life, after we had arrived at sufficient age, was spent in the business of Breaking Colts and Training Horses. An experience of a number of years qualified us, in our estimation, to travel throughout the country in the business of educating the Horse, practicing such means and using such knowledge as was then at our command. When, however, we attempted to do business outside the circle of our acquaintance, we invariably met with a repugnance on the part of the public to have any thing to do with a professional "Horse-Tamer," as we were then called. So many persons who were entirely unfitted for the business had imposed upon the people, that they wisely refused to be any longer humbugged.

Satisfied from our experience with the Horse that he possessed more intelligence than was generally accredited to him, and feeling the necessity of doing something to legitimately bring ourselves into notice, we

put into effect a long-cherished idea, which was to so train a horse as to not only make his exhibition a novelty, but to satisfy the public that we possessed, by means of the knowledge we had acquired, more than ordinary control over the animal which we advertised ourselves to educate.

Being confident that, by means then known to us, we could teach the horse to be *driven without reins*, we made our first attempt upon the now celebrated horse, owned by us, *Morgan Tiger*.

This horse was sent to us at our residence in Broome county, N. Y., to break of a very vicious and long-standing habit of frequently frisking and kicking when hitched to a wagon. *Tiger* was at that time—August, 1860—owned by JOHN S. TARBELL, proprietor of the Franklin House, at Montrose, Pa. We applied to *Tiger* our system, with marked success, and in *sixteen days* from the time he came into our possession we exhibited him before the Susquehanna County (Pa.) Agricultural Society; to the utter surprise of the people, driving him—to a sulky—*without reins*, rapidly around the track—turning, stopping, and starting, with perfect success.

At this time we were invited by Gov. GEARY and Gen. STURTEVANT, two of the managers of the Pennsylvania State Agricultural Society, to give an exhibition at their forthcoming State Fair, at Wyoming. The following notice, heralding our coming, appeared in the *Luzerne Union*, of the date of Sept. 19, 1860, at the close of an article upon the State Fair:

"In addition to the other attractions, we understand that Mr. JOHN S. TARBELL will be present during the Fair with his celebrated Stallion *Morgan Tiger*, formerly a very wicked horse, but has been so thoroughly trained and broken by A. H. ROCKWELL, of Broome

county, N. Y., that he will be driven around the course at full speed before a sulky, *without bridle or reins!* Mr. ROCKWELL will also be on hand to exhibit his skill in the management and taming of the worst-tempered horses."

At the Fair in the following week we appeared according to announcement, exhibiting on the afternoon of each of the three days. Mr. ROCKWELL here proved to the entire satisfaction of himself and the public that his theory of driving without lines was a fixed fact. He drove *Tiger* to a skeleton-wagon, with simply a surcingle to hold up the thills, without bridle, reins, breeching, or breast-collar, driving him at a slashing pace, surging him to and fro, breaking him up and running him, turning and twisting in all directions—in fact, handling him with all the ease that the most accomplished horseman could a well-broke horse with the reins, and all by a few motions with the whip, without speaking a word. At the conclusion of each performance Mr. ROCKWELL was loudly cheered by the assembled multitude, and received congratulations on all hands from the most skillful horsemen in the State, for his unrivaled success.

The next exhibition was at the State Fair at Elmira, New-York, in the same fall. This exhibition will be remembered by those present as exciting the wonder and admiration of those who saw it, and the disappointment of those who were not on the grounds at the time.

After a few other exhibitions at County Fairs, the horse was returned to Mr. TARBELL, the owner, where he remained until in the winter of 1860–61, when Mr. ROCKWELL again took him and gave exhibitions to private audiences in halls, walking the horse up and down stairs, to and from his performances. This he did for

several weeks, in the States of Pennsylvania and New York, when the horse was again returned to the owner.

In January, 1862, Mr. ROCKWELL purchased *Tiger* of Mr. TARBELL, since which time he has been almost constantly giving exhibitions in the States and in Canada.

In April, 1862, Mr. ROCKWELL trained the pet colt *Baby*, a three-year-old dark chestnut colt, with a small star in the forehead, the near hind-foot white; a splendid animal, sired by *Tiger*, and purchased by Mr. ROCKWELL and Dr. J. H. CALDWELL, of Michigan. Of this colt the *Hudson* (N. Y.) *Gazette* of May 22, 1862, says:

"Prof. ROCKWELL gave an exhibition of his wonderful control over this spirited animal, on the Fair Ground on Wednesday afternoon, in the presence of many of the most distinguished horsemen in the county, where he drove a span of highly-mettled stallions attached to a light wagon, around the track without bridle, reins, breeching or collar, controlling them wholly with his whip and voice. One of them, a beautiful three-year-old, had been broke and received all his training within seven weeks. After this feat, the Professor hitched the colt to a skeleton-wagon in the same manner, and drove at the top of his speed around the course, which extraordinary performance drew the wildest applause from the judges and the immense throng of spectators."

This was the first exhibition ever given of a double team driven without reins. The horse which was hitched by the side of the colt, was *Tiger*, his sire. Dr. CALDWELL has since purchased our interest in this colt *Baby*, and has traveled in the Western States exhibiting him.

The next horse broke to be driven without reins, was a somewhat noted vicious horse belonging in St. Lawrence county, N. Y., called *Turco*. This horse belonged to Mr. D. MAGNER, since become a successful

horse-trainer, whom we met in the spring previous, and who, upon hearing our system, dropped the old systems which he had been practicing, and adopted ours. He has since written a book upon the Training of the Horse, and has been a valuable aid to others in the education of this animal. His horse he broke himself under instructions sought of and given him by us by letters written. This horse has since been exhibited throughout some of the Eastern States and Pennsylvania.

In the fall of 1862 we gave an exhibition at the National Horse Fair at Buffalo; soon after giving another at the Provincial Fair at Toronto, Canada West. Thence we proceeded to give exhibitions, and hold classes for instruction, with great success, throughout Canada and the New-England States. Among the places visited was Montreal, Montpelier, Vt., (exhibiting before the State Legislature,) Brattleboro, Vt., Springfield, Mass., etc.

At Springfield, in March, 1863, we purchased the horse *Star*, now owned by us. This horse was sold to us upon a written warrantee that he was "sound, could trot in 2.50, and would *go into the first barn he saw open*, in spite of your efforts to prevent." We found him all he was advertised, being especially confirmed in his bad habits. The next day after his purchase he was driven to Hartford, Ct., and on the following day he was brought before our class of instruction to receive his first lesson in driving without reins and being broke of his bad habits. He received such training as we could find time to give him while traveling constantly, giving exhibitions; and on May 9th, a little over a month from the time we took the horse, we gave an exhibition of *Star* and *Tiger* hitched together, at Worcester, Mass., the horses driving beautifully without reins.

On the 3d of April, 1863, we commenced training a wild and nervous Black Hawk horse for Messrs. WILLIAMS & WILDER, who were at that time receiving instructions from us, preparatory to giving instructions themselves. In about six days we delivered them the horse, and on the following week they gave a successful exhibition at Whittingham, Vt. They continued to give successful performances for some months, when through entire carelessness on the part of the driver, the horse was severely injured by the breaking of a vehicle, and has not since been exhibited. We are informed that each of these two gentlemen has a horse which he is driving without reins, broke according to our directions.

In the following December we purchased a black stallion at Providence, R. I., broke him perfectly to drive, and in the February after, at Lowell, Mass., sold him to a gentleman named GAMMON, who has since exhibited him in the British Provinces, giving lessons in training which he had learned from us.

At Boston, Mass., in March, 1864, we sold *Tiger* and *Star* to E. C. DUDLEY, of Newton Upper Falls, Mass., for $5000 with instructions. Mr. DUDLEY traveled with the team, giving exhibitions, until January 1865, when after having been quite successful, (Mr. ROCKWELL remaining with the team and driving them during this time,) we purchased them back. After repurchasing them, we gave a famous exhibition, by a permit of the city authorities, granted upon petition of many prominent citizens, at Fairmount Park, Philadelphia; afterward at the Dubois Track, New-York City, before an audience of the prominent horse fanciers of that city. At this exhibition we introduced our three-year-old stallion *Hamlet*, which we had previously

trained. Of this exhibition the N. Y. *Tribune* of May 20th, 1865, says:

"A truly novel and wonderful exhibition of skill in the management of horses was given yesterday afternoon at the Dubois Association Track, on Eighth Avenue, near One Hundred and Forty-eighth street. Messrs ROCKWELL and HURLBURT, the celebrated trainers of horses, demonstrated to the persons assembled, the great superiority of mental power to that of physical. The exercises were commenced by Mr. E. A. HURLBURT driving a two-year-old colt to a wagon, without the use of reins or of any other harness except barely sufficient to fasten the horse to the carriage. The horse was guided by the motions of the whip. It would trot, run, turn partially or wholly around, and back with perfect ease. In fact, it appeared that the horse went through with the evolutions much more easily and quickly than if the reins were used. Mr. ROCKWELL then brought forward a beautiful span of stallions which were made to perform the same feats. These horses were so trained that they would pass and go around other vehicles with the utmost ease. One horse would canter, while the other would still continue to trot. The horses were then unfastened from the buggy, and allowed to roam within the crowd. Mr. ROCKWELL had one of the horses perform some tricks, such as following him, kicking with one foot, etc. He asked the horse a few questions, which were responded to by shaking the head. The horses were then trotted around the course, after which Mr. ROCKWELL made a speech to the persons present, among whom were some of the owners and drivers of the fastest teams in the city. They all expressed their great wonder at the performance, and their wish to understand the art. There will be another

exhibition of the same sort this afternoon, at four o'clock, at the same place. There will most probably be a large gathering."

While in Philadelphia we sold to Mr. DUDLEY the large chestnut horse *Rob Roy*, afterward used by him in exhibitions. This horse performs tricks in the public street, taught him by us. He has since been exhibited by the firm of MAGNER & DUDLEY.

We make the following extract, referring to two other horses, from the *Chenango American*, a newspaper published at Greene, Chenango Co., N. Y.

"HORSEMANSHIP EXTRAORDINARY.—Nearly every day a sight may be seen in our streets which is very seldom witnessed elsewhere. Messrs. LE ROY COWLES and J. D. COWLES, of this village, pupils of the celebrated horse-trainer, A. H. ROCKWELL, have two stallions, one a large, noble-looking and highly-spirited animal, well known in this section by the name of *Wm. Miner*, and the other a beautifully marked and graceful horse, called *Spot Beauty*. These horses are driven through our streets *without any reins* or other modes of guiding or controlling them except by the motion of the whip held in the hands of the drivers who are seated behind them. They drive at a slashing pace, turn quickly and gracefully, stop suddenly, back, walk or trot, and all without a word being spoken, and by no other means than by the motion of the significant whip. About a year since, Mr. ROCKWELL gave us an exhibition of similar driving of his trained stallions *Tiger* and *Star*, which excited the wonder and admiration of the public."

About the first of December, 1865, we purchased at

Webster, Wayne county, N. Y., the milk-whit colt *Mazeppa*, and in the last of March, 1866, we gt an exhibition with him before the public, hitched to carriage, without reins, at Georgetown, Ohio, acknowledged by all who witnessed it to be the most perfect exhibition of the kind they had ever seen. Since that time, we have exhibited him constantly, through Western Ohio, Central Indiana, and in Michigan. He is of a perfectly milk-white color, beautifully formed, of graceful carriage, and is advertised as the *handsomest horse in America*. He is now so trained, that we hitch him up between *Tiger* and *Star* in a triple pair of shafts, adapted to the purpose, enabling us to give the only exhibition ever known of *driving without reins*, THREE HORSES ABREAST to a carriage.

We had forwarded to us at Columbus, Ohio, in February, 1866, a dark chestnut horse, bearing the same name—*Rob Roy*—as the one purchased by DUDLEY. He was trained by E. A. HURLBURT, at Harpersville, Broome county. This horse we hitched up with *Hamlet*, at Columbus, his trainer driving the team without reins. At that time, and at our exhibitions which followed during the summer of 1866, up to June 14th, 1866, this *Rob Roy* was owned by M. D. HURLBURT, of the late firm of ROCKWELL & HURLBURT. At that date, Mr. A. H. ROCKWELL purchased him for $1000, and continued to give exhibitions with him in connection with his other horses, until the last week in August, 1866, when he sold him for $1500 to W. W. HOTCHKISS, of Windsor, Broome county, N. Y., who is now giving exhibitions with him and *Hamlet*, the latter horse being still owned by Mr. ROCKWELL.

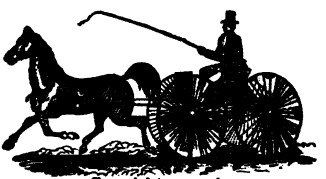
This concludes the history of all horses driven without reins, which have been exhibited to the public, and

it will be seen that in every instance their training is traceable directly to us and our system.

Tiger and *Star* are still in our possession. *Tiger* is thirteen years old, of the Gifford-Morgan stock, is a dark chestnut, near hind-foot white — a beautifully formed horse, being rarely excelled for style and action. He has commanded the first premium wherever offered for competition. *Star* is nine years old, of the Black Hawk stock, (owned by HILL, of Vermont,) a beautiful dark bay, black mane and tail, black legs, faithfully representing the famous stock from whence he sprung. He is also superior in all the qualities which tend to make a magnificent horse. They each weigh one thousand pounds when very fat.

The driving of horses without reins not being of practical utility to the public generally, it does not come within the scope of our instructions.

The foregoing portion of the work is not private, and may be read aloud to those interested.



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APPENDIX.

It is the intention of the author of this work, at an early day, to revise, remodel and enlarge the same. In the meantime, he feels it a duty he owes to those who patronize his enterprise, to lay before them some of the important improvements and inventions, which are the fruits of his diligent study, and an active experience in the business of instructing the public in the Education of the Horse. These pages (up to page 17) are therefore added as an *appendix*. The instructions herein given will be found to be a radical improvement upon some of the teachings in the main body of the book, particularly wherever the "Yankee Bridle" is referred to.

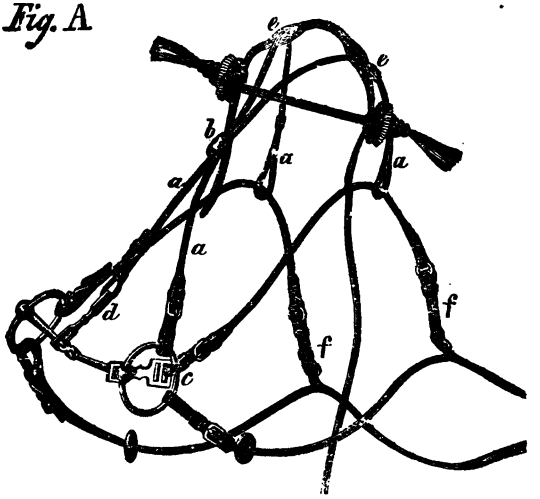
The most important improvement discovered and applied by Mr. Rockwell is his

OVERDRAW AND COMPRESSION BIT,

secured by two patents. This combination is now used by him in place of the double-ring bit (page 48), for which it may readily be substituted. It is found by experience to be much more effective than any former plan, being susceptible of many applications, and proving

a perfect success in each. The accompanying Figure A is a "SKELETON BRIDLE" with these attachments.

Fig. A



The *Overdraw* is formed of two round straps, with a buckle and billet as represented by *a a* at the left of the figure, terminating in the two loops at the other ends *a a* at the right of the figure. Each of the straps, when buckled, to be two feet and two inches in length. A tight sliding loop, *b*, connects the straps. This loop should be stitched between the two straps, so as to work snugly. A sliding knob is snugly attached to each strap above the loop. The *Compression Bit* is a joint bit in the usual form, except that it is double jointed, with the two sliding bars *c* and *d*. The figure represents two modes of attaching these sliding bars, which are hereafter explained.

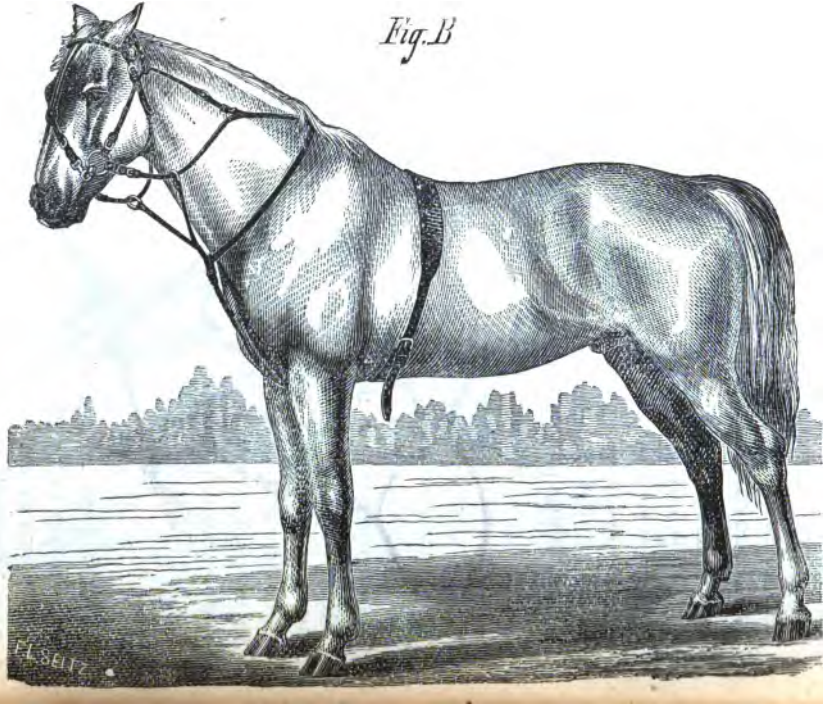


Fig. B

By using this Bit in place of the one used in connection with the "Yankee Bridle," described on pages 47–50, more reliable and positive results are obtained, with less labor. There are many uses, however, to which this Overdraw and Bit may be applied, to which there is no reference made in the pages which follow this appendix, a few of which we will proceed to explain.

THE SKELETON BRIDLE.

The chief advantage which this Bridle has over every other Bridle known is owing to the wonderful results which follow the application of the overdraw and compression bit in their various uses. Figure *A* will aid the reader to understand our illustration of this Bridle. It is formed of a crown-piece and throat-latch of one piece of leather, lined over the head with patent-leather. Two loops are placed on top of the crown-piece, three inches apart, *ee;* the fore-piece to be of the usual length, rosettes may be added to suit fancy; throat-latch of usual length; the loops of the overdraw and the knobs are put through the loops on the crown-piece, from front to back, the rest of the overdraw coming down over the face and being attached to the bit. It is attached in various ways, according to the end desired to be attained; but for the ordinary purposes of a riding or driving bridle, it is buckled to the ring of the bit. The remainder of the bridle consists of an ordinary driving line buckled to the ring of the bit, and an ordinary check rein, buckled to the ring of the bit and the sliding-bar jointly (see *c*), passing through the loop of the overdraw, *a*, as through a gag-runner; on the driving-line, two inches farther back than the length of the check-rein, there is fastened a strap about four inches in length

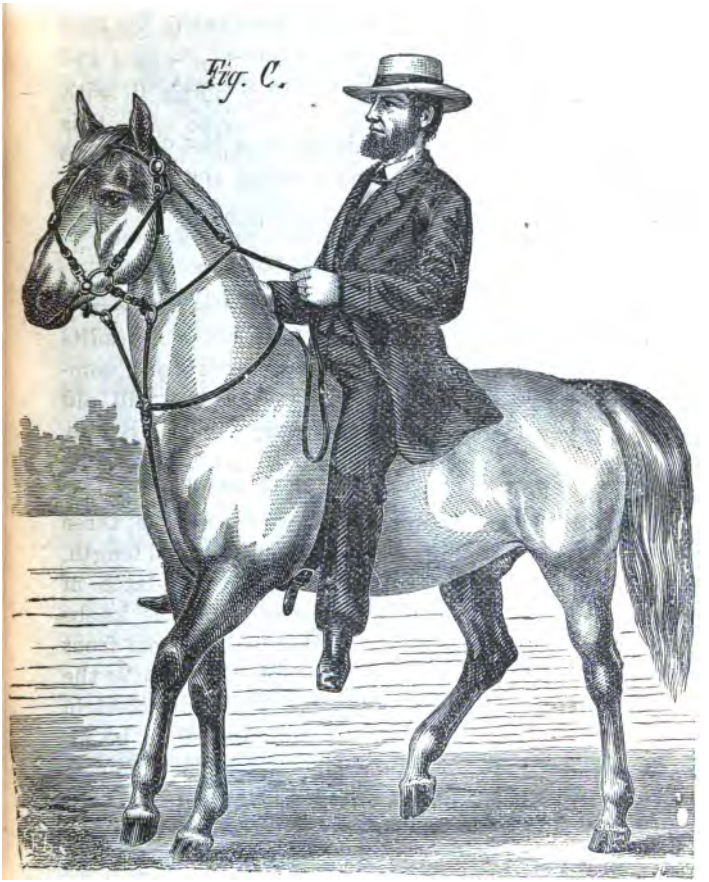


Fig. C.

when doubled (*ff*) arranged the same as the flat part of a check-rein, capable of being adjusted, which strap is connected with a ring on the end of the check-rein

FOR A SADDLE HORSE—This is put on as just described, with the addition of a Martingale when the horse carries his head too high and his nose out too much. The illurtration, figure *B*, exhibits a horse bridled ready for mounting, and figure *C* shows the horse mounted and lines drawn up. These two illustrations have the overdraw buckled to the sliding-bars, as shown by the letter *d*, figure *A*. This is proper where the horse pulls too hard or refuses to rein; but ordinarily it should be attached as shown by figures *D* and *E*.

FOR A DRIVING HORSE. — There is no change from the bridle as applied to a saddle horse (when an open bridle is desired), except in the mode of attaching the check-rein to the driving line, as the adjustable knobs on the overdraw hold the bit in the mouth and avoid the necessity for a cheek-piece. The driving-line being usually rounded, a strap is made to lap around — drawn so tightly that it cannot slip — at the place where the check-rein is attached to the main driving-line, as heretofore described. The overdraw may be attached to a common driving-bridle if desired. In this case, the knobs will not be necessary, as the cheek-piece answers the purpose for which they are intended. The advantages are manifold. While sitting in your carriage, by drawing up the lines you have all the benefits of a check in adding style (*see figure D*), without any of its cruelty, as you can, by letting up on the lines while the animal is traveling, entirely relieve him from its pressure; you

Fig. D

can water him at the trough (*see figure E*) without removing from your seat; his back is not galled, he travels freer, rests better when not in motion, mounts a hill much easier, and is held up descending a hill with more security; his head is kept up while standing, if desired, by fastening the lines to the whip, dashboard, or a hook in the buggy-top. Horses driven with this overdraw and bit will travel more miles in a day and last longer than by the use of any other contrivance known. If the horse is a hard puller, attach the overdraw to the sliding-bars independent of the bit-rings, as in Figures *B* and *C*. This creates a pressure upon the cheek which soon causes him to be more pliable. If he is a side-reiner, attach the end of the overdraw on the side towards which he turns his head, to the detached sliding bar, leaving the other attached to the ring, exactly as shown in Figure *A*. By sliding the front loop on the overdraw, up or down, you increase or lessen the effectiveness of these appliances, when operating upon the sliding-bar detached from the check-rein and bit-ring. If a horse carries his head lower than his mate, and you wish to cause him to raise it, apply the overdraw to the common bridle, in lieu of the usual gag-runner; if a trotting horse throws his head down while speeding, use the overdraw, and check high. If you wish to drive without a check-rein, and want the advantage of the compression-bit, make what we call a half-overdraw, by fastening a short overdraw to the head-piece, instead of passing it through the loops; then, by sliding the front loop up or down, you can regulate its force. *Governing the mouth* is the main thing. This attachment will do it by the use of a reasonable degree of judgment. We have not room to explain here a hundreth part of the

Fig. II

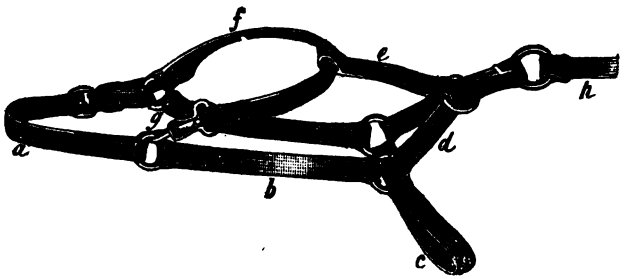
benefits to be derived from their use. A careful study of this Book, and a substitution of these attachments for those therein mentioned, where applicable, will, by a fair exercise of patience and common sense, prove invaluable to those interested in the improvement of this useful servant of mankind.

THE IMPROVED BITTING BRIDLE.

For this, use anything which answers the purpose of a girth and back-strap. Take a common bridle, with two loops added to the crown-piece; apply the overdraw, using the compression-bit with the bars and rings attached to the cheek-piece, forming a common bit, though much easier to the mouth, and the overdraw buckled to the bit-ring. Use a common cotton clothes-line, about sixteen feet in length; fasten the middle of this rope to the check-hook, so that it cannot slip; pass each end of the rope on each side of the neck, through the loops of the overdraw, down through the ring of the bit; bring them back, and tie to the girth back of the fore-legs, well under the colt, not drawing them very tight. Allow the colt to wear this about fifteen minutes. For the next lesson, the rope is brought up farther on the sides of the colt, and drawn a little tighter. Proceed in this manner at intervals of about fifteen minutes, raising the ropes on the sides and tightening until the head is in the desired position. The value of this bridle lies in the perfection of the results attained, its simplicity and cheapness. No colt was ever injured by its use, his head having free play up and down, strengthening instead of paralyzing the muscles of the neck, and admitting of free circulation.

THE IMPROVED HALTER.

We give below an illustration of the handiest, cheapest and most durable Halter which has come to our knowledge.

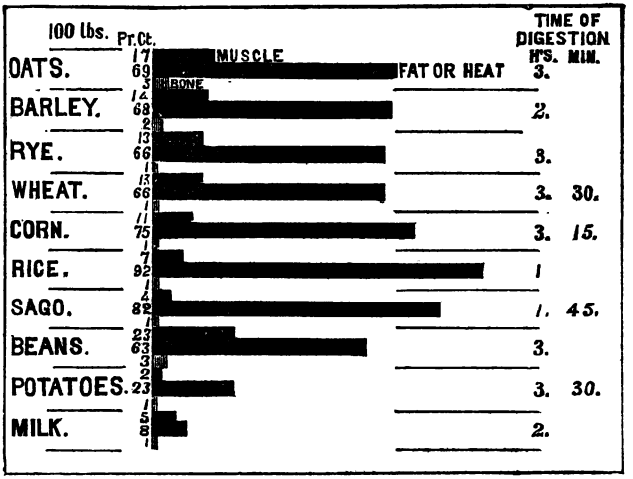


The dimensions are as follows: Strap *a*, 13 1-2 inches long; *b*, 10; *c*, 14; *d*, 15 1-2; *e*, 7; *f*, 16 1-2. The snap *g* is one of the principal advantages of this Halter. It allows it to be taken off or put on with great ease and rapidity; *h* is the halter stale. The strap *a* is to buckle on the off side of the horse, the buckle to be used only to adjust to the size of the horse's head. The use of the ring on strap *d* is to slip up and fit around the nose when the halter stale is pulled upon.

This Halter is a loose one, and consequently easy to the head, but is in no danger of slipping off, as the least pull upon the halter-stale tightens it around the nose. For horses in the habit of escaping from their halter, this is particularly recommended. No horse will be injured by getting loose nights, where it is used.

COMPOSITION OF FOOD.

We have, at great pains, obtained from reliable scientific sources the following very valuable table, showing the exact proportion of bone, muscle and fat which the various articles of food produce. By a careful observance of this table, and feeding such food as will produce such constituent parts as are required in animals, according to the uses to which they are put, the horse-owner or farmer will be enabled to rear animals in accordance with scientific laws.



100 lbs. is taken as the standard, and the table will be found to give not only the relative proportion of bone, muscle, and fat, but the time of digestion in healthy animals, with ordinary usage, of the various articles of food named.

TRAINING OF HORSES.

HAVING had an experience of thirteen years in the business of Breaking Colts and Training Horses, and having given particular attention to the nature, habits, and disposition of the Horse, we have, by the light of our experience, made many valuable improvements in the system of educating this useful animal to be subservient to the wants of man. In the following lessons we endeavor to explain, in the most direct manner possible, certain infallible rules, which, if strictly adhered to, will surely and safely accomplish the desired result. Explanations of the traits, habits, and causes of the habits, of the animal, with reasons for every step we take, will, as far as necessary, accompany each illustration.

In laying these illustrations before the reader we desire to impress him with the idea that we are not, in the common acceptation of the term, "horse-*tamers*." We have a higher and nobler aim than to merely tame

and subdue this valuable animal. Our object is to *educate* him—to operate through such intelligences as are given him; and by careful, patient, and kind treatment, *guide*, *direct*, and *teach* the horse what is required of him. You may, perhaps, by harsh and cruel treatment, break his spirit and compel him, through abject fear, to obey certain commands, but unless you accompany your acts, which should, as far as possible be gentle and humane, by some method which will convince the intelligence of the horse, and which will thereby make a lasting impression, you have not reached the true theory of Horse-Training.

We have no disposition to interfere with or denounce other systems, but in putting our system before the public in printed form, it is a duty we owe to ourselves to fully explain wherein lies its advantage over other systems. This can not, perhaps, be better done than by giving an example; thus:

Suppose you have a horse which kicks at you every time you attempt to enter his stall. You have perhaps been told by some professional horse-tamer, that if you strap up one fore-foot and tie a strap to the other, then pull up on the strap, you may throw the horse down, and that if you repeat this a few times, he will become docile, and allow you to enter the stall without his kicking you; and you have then probably been told, that, upon the theory of showing the animal your power over him, you have broken him of the habit, and that the same rule will apply to all other bad habits. The

fact is that for the time being you have tired, wearied, frightened and broken down your horse, and he has no ambition or strength to kick or give evidence of other habits, good or bad. The next day you attempt to enter your stall, and you will find him as much a kicker as ever. You quite reasonably ask, "How long does this horse-taming last?" The tamer will tell you to repeat the operation; and so you may, until you have destroyed your horse; but you have *taught him nothing*, except, perhaps, to fall down when you make the motion to put on the straps.

We believe, in a measure, in subduing the horse, but at the same time he must know for what purpose, and the application of the power which you possess over him must be made directly to *each* bad habit of which you wish to cure him, or to *each* new habit you wish him to form. We wish to make it plain that our theory is, that for *every habit* you cure or cause to be formed, there must be a *separate* and *distinct lesson*, and submission and understanding, on the part of the horse, obtained in *each instance*. This is the *only* submission which is of any real value. The illustrations which we give of our manner of proceeding carry this theory into effectual practice.

The horse trained after our method loses none of his vigor or elasticity, and as he is taught each lesson, if our advice is closely followed, it will be given at the right time in the right place, and be founded upon the laws of nature; and the practice being continued until hab

its are formed, he is permanently educated to your wants.

Of course, a horse which can be broken of a bad habit and taught a useful one, may by the same rule have his habits reversed; or may by careless handling lose the useful habit and acquire bad ones; but by proper usage, the horses taught by our method retain their lessons throughout life.

We now commence our illustrations of our method, again cautioning the operator to be careful and explicitly follow our directions, as some professed horse-tamers have borrowed portions of our system, and leaving out some apparently trifling yet important items, have contributed to bring the business into disrepute. We begin with

THE WILD COLT.

The first step to be taken is to see that the inclosure in which you intend to operate upon the colt is unoccupied by any thing which might distract the attention of the colt; for instance, fowls, domestic animals, etc., and all persons except the one who is to undertake the training. This latter precaution should be taken for the reason that the presence of other parties would annoy the colt; also, that by allowing them to be present you would violate the conditions of your instruction.

Being prepared, the object is then to get the colt into his training place as carefully as possible, using such gentle means as may be convenient and most likely to be successful without exciting the colt. Every

farmer or person at all acquainted with the management of horses knows well enough how to do this in his own way, without being governed by any fixed rule. The next thing to be done is to

HALTER-BREAK THE COLT.

This operation is often accompanied with danger unless the proper steps are taken to avoid it. Our experience has taught us, that at this point it is well to be governed by these rules: *First*, Provide against accident to yourself; *Second*, Secure your horse against the possibility of injury; *Third*, Accomplish your desire with the animal in the quickest time possible to render the lesson a permanent one. Having these rules in view, we proceed as follows: Take a stick about the size of a rake-stale, and about ten or twelve feet in length, the length to be governed by the prospect of danger from the viciousness or nervousness of the colt. Commence within about an inch of one end, and whittle up a few stout shavings on one side, whittling *toward* the centre of the stick, and leaving the shavings attached to the stick; a few inches from the shavings alluded to, (the distance to be governed by the width apart of the colt's ears,) whittle up a few similar shavings, whittling this time *from* the centre of the stick. Take a common rope halter, with a running noose; hang the part of the halter which is intended to rest on the head back of the ears, upon the shavings, (they being strong enough to bear the weight of the halter,) turn

ing the shavings upward for security in holding it You are now ready to commence operations with the colt, in doing which it is advisable to understand the fact that *curiosity* is a strong trait in the horse, and when not overcome by fear or some other powerful influence, is sure to prevail. This you can test previous to operating if you choose, by placing a hat or handkerchief upon the end of your stick and holding it toward the colt. He may be alarmed at first, but if you remain quiet, moving the object gently, the nature of the colt will be to reach his nose toward it, and quite likely to touch it. He will soon become accustomed to the stick, and will manifest the same curiosity in regard to the halter. You will now take the halter, with the noose unloosened perhaps half the length of the halter-stale, holding the end with the stick in both hands, the halter being placed upon the shavings as before suggested. If the halter-stale is not long enough, attach a piece, as it is best to keep yourself as far as possible from the colt. The colt will gradually begin to smell at the halter, when you will hold the stick pretty well up over the head, and while the animal's attention is attracted by the swinging of the halter, and his nose near that portion of the halter-stale which is slipped through the noose, you will gently pass the rope over his ears, and turning the stick half round, drop the rope from the shavings upon the colt's head just back of the ears. This will probably cause the colt to start back, and by holding firmly upon the halter-stale, the noose

will be drawn up, fastening the halter upon the head. The stick may now be laid aside.

Having your colt haltered, your object is now to teach him its use. You will take a position about opposite the shoulder, still keeping at a distance, and give him a sharp, short pull toward you, sufficient to move him, immediately slackening your pull. The object in doing this is to cause the animal to feel your power to move him, and by slackening the pull you do not give him time to resist, which, if the pull should be steady, he will do, even to the extent of throwing himself down, (which is to be always avoided.) This you may repeat for a few times, until the disposition to resist seems to grow weaker. You will then repeat the operation upon the other side, alternating from side to side, (always avoiding a forward pull,) and continuing the short pulls until the colt either moves readily or becomes stubborn. The reason for working upon both sides is, that in this, as well as all other points which you attempt to instruct the horse, there are *two sides to teach*. What he learns to do from one side must be learned by the same process on the other side, in order to have the same understanding of what is required of him. The reason for avoiding a forward pull is, that you can not easily move the colt in that direction; and as he learns from your acts, you should attempt to perform no act in which you are not reasonably sure to succeed.

If the colt appears to be of a yielding disposition, you will now gradually shorten your hold upon the halter,

as you pull from side to side, being watchful to avoid the possibility of his striking or kicking you, until you come within reach of his head, when you will gently put forth your hand and allow him to examine it with his nose—that organ being the one made use of by all horses to test the danger or harmlessness of substances which alarm them. As he becomes accustomed to your presence, which he will readily do if you are gentle, you will then proceed to carefully caress him over the face and forehead, gradually extending your hand down his neck, being cautious not to touch his ears. As soon as he begins to cringe or grow restive under your hand, remove it and gently place it again near his nose, repeating the former operation, extending the hand farther and farther at each repetition, until he becomes calm. You will now quietly tie a knot through the noose, so that it can not slip, leaving it quite loose, to *avoid hurting him.* Remember that up to this point you have not *hurt* the colt, and have therefore called out no undue resistance on his part. The main objection to a rope halter has been that it was used in such a manner as to hurt the colt. We obviate this objection, first, by the short pull and slackening up before the resistance is excited; second, by tying the knot as soon as practicable, so that the noose can not tighten around the nose. At any time after this during the process, when you can safely do so, you may, if you choose, change to a strap halter. You will now step back and repeat the pulling operation, being careful

to get a *side* pull. As you pass in front, if the colt shows a disposition to move, instead of pulling immediately, first approach and caress him, performing slowly and gently, and, as far as you can, *encouraging* the animal whenever he shows signs of doing what you require until he steps willingly *without* the pull.

Should the colt prove to be of a *stubborn* disposition, and refuse to move as you desire, you will take hold of the halter-stale with your left hand about a foot from the head, and with your right hand seize him by the tail, and give him a few sharp turns around, pulling the head toward you, and giving him an occasional kick with the top of your foot across the buttock. (*See Figure* 4.) This will have the effect of creating a degree of submission, the colt learning that he has a master. Now proceed with the pulling as before; and if he remains stubborn, repeat the operation of turning, twice or three times. By this time he will probably appear to brighten up, and show signs of being willing to step. If he should not, you will take a bow-top whip or beech limb in your right hand, holding the halter-stale with your left hand, you standing by his side. Hold the whip over the back of the colt and touch him gently with it across the off-side hip, at the same moment giving a gentle side pull upon the halter. (*See Figure* 1.) If he starts with this movement, caress him and then repeat with the whip. If he does not start, use a little more force with the whip. If he is still stubborn and does not show signs of moving, caress

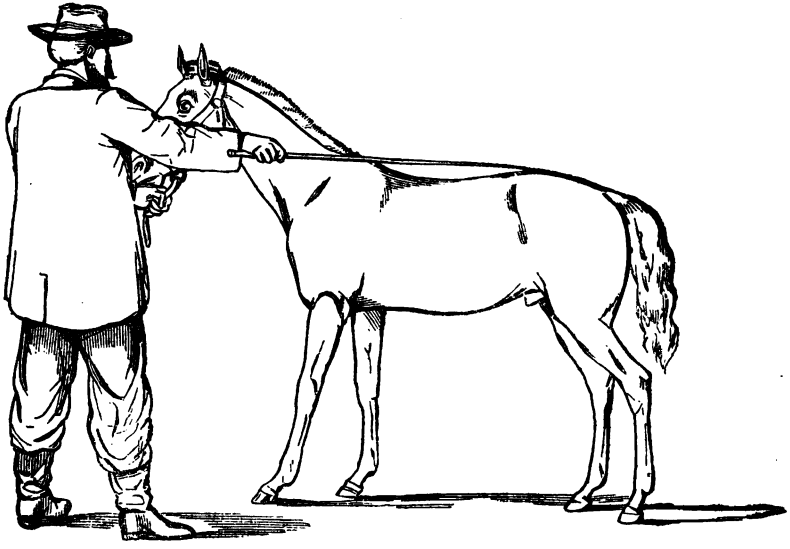


Figure 1.

him, give him a kind look or word, and step back a few moments before proceeding, allowing him to get quiet if he appears angered; as the reason for this conduct is that the colt is frightened, and by your kindness and patience alone is he to be assured that you do not mean to injure him. He will soon grow less excited, when you may proceed. As soon as the colt will step readily at a slight side pull, take off the halter or throw the halter-stale over the neck, and let him go. This will do for the first lesson.

The colt should now be left alone for at least half an hour, or until he has recovered from the excitement. Any time thereafter, the lesson may be repeated; and as soon as he becomes perfectly accustomed to obey the side pull, you may then, and not before, commence to teach him to obey the forward pull, by gently pulling him straight ahead; and if he leads, no matter how little, caress him, and repeat; but be careful and not pull too hard. If he does not move with a reasonable pull, give him two or three of the short side pulls, and try again. In a little while he will obey your desire, and lead. Be sure and not give a determined pull in front, as it will not succeed, and will only teach the colt your weakness, and by inflicting pain upon him learn him to pull at the halter—the natural movement being in an opposite direction from whatever causes the pain. You are now ready for

HITCHING THE COLT IN THE STALL.

The stall, which should be a common one-horse stall, about four feet wide, should be prepared by having a hole bored on each side of the rear end of the stall, to put a pole through, or staples driven in to tie a rope or strap across, at about the height where the breeching would come on the colt if harnessed. You will lead the colt into the stall; and if some other person can be called to assist, have him put up the pole or strap—if not, do it yourself, being sure to have it done *before you tie the colt.* If required to do it yourself, first pass the end of the halter-stale through the ring or place of tying, and keep your hold of the end, so that if the colt attempts to pull back, you can step forward and caress and quiet him. The reason for putting up the obstruction in the rear before tying is, because you thereby avoid the risk of the colt, through fright, pulling at the halter. When once tied, which should be with considerable slack, if he attempts to back out of the stall he will hit the rope or pole and step *forward,* instead of hurting his head with the halter and *pulling harder to avoid the hurt.* In removing the colt from the stall be sure and untie the halter before loosening the obstruction in the rear, and for the first few days be careful and not hitch the colt where he can have a chance to pull. By observing these rules for eight or ten days, there is no danger that the colt will ever become a halter-puller. Bear in mind that during the entire process of handling the colt it is proper and neces

sary to speak to him in a mild manner, for the purpose of familiarizing him with your voice, and as a partial guard over your own temper. Never speak sharp or over loud, but gently and firmly. For instance, in your side pulls say, "Come here, sir!" This kept up, will eventually teach the colt to come to you on being called by these words.

TO GET THE COLT USED TO THE BIT.

Place on the colt an ordinary head-stall with a joint bit, without any check-strap or reins. Leave him in the stable or yard for a few minutes, then remove it. Frequently replace it, and allow it to remain on a short time. By this means his mouth becomes used to the bit, which is a great improvement on the old way of putting on the bitting-bridle at once. After a few times doing this, the colt is ready for

THE BITTING-BRIDLE.

For this, first prepare a well padded leather girth, with three loops firmly riveted on—one at the centre on the back, and one on each side about a third of the way down the side of the colt. The strap which is attached to the crouper should have a crotch of about six inches, and be about twelve inches long altogether. The slit part to be buckled to the crouper, the other end to have attached thereto a two-inch ring lying flat upon the haunch. To this ring is buckled a strap which runs along the back through the loop on top of the girth, and has a ring on the end placed perpendicu

larly, to which is to be attached the check-rein. This strap is to be double, so as to be taken up or let out, to meet the check-rein, and to be adapted to the length of the back. To the ring on the haunch attach two short straps, (one on each side of the back-strap alluded to,) about eight inches long, with a buckle on the end of each. Use a common head-stall, with the gag-runners made of leather, well placed up toward the ears, and with a large joint-bit; the throat-latch to be made large, and to buckle under the gag-runner. The side straps to be about five feet long, with a snap on one end, and holes for the buckle-tongue on the other end. These straps are to be fastened by the snap to the bit and then passed through the side loops on the girth, and be buckled to the short straps fastened to the ring on the haunch. (*See Figure* 2.)

Another bridle, known as ROCKWELL'S Bridle, is cheaper and in many instances better. Take a common harness pad and crouper; pull out the breeching-strap and take out the terrets, (or a rope around the body and a strap for the crouper will answer.) Put on a common driving-bridle without blinds; under all circumstances use a joint-bit. Take a piece of cotton clothes-line rope, about eight feet long; place the centre of the rope in the check-hook or fasten it to the strap which runs to the crouper; pass one end of the rope through the gag-runner on the near side of the horse, passing it from toward the nostril back through the ring of the bit; draw it tolerably tight, and tie it to the pad or

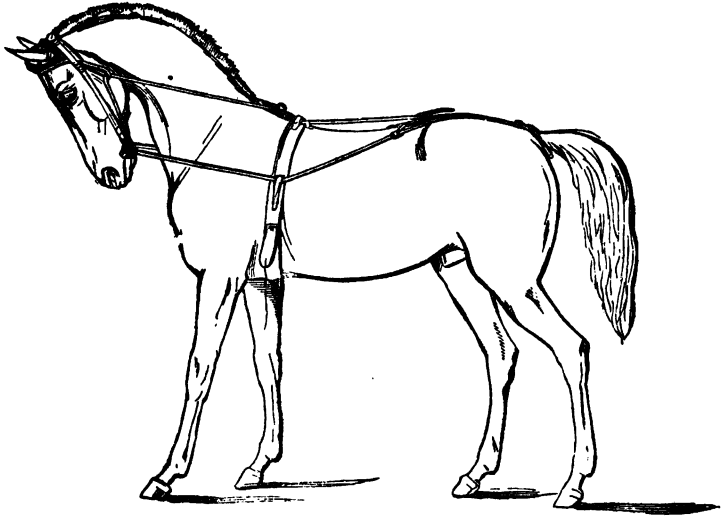


Figure 2.

girth at the side. Perform the same operation on the off-side. You will see that by tying the rope to the girth well up the sides toward the check-hook, it will compel him to hold his head high and will throw the nose out; by tying them well down on the side, it will lower the head and curve the neck, at the same time giving him the power to move the head up and down with considerable ease. In cases where bitting is required only for the purpose of suppling and developing the muscles of the neck, this bridle should be used, as we have never known a horse to be injured by falling backward by being geared in this bridle. Having your bridle prepared, you may now proceed to

BITTING THE COLT.

In placing the bitting-bridle upon the colt great care should be taken not to buckle any of the straps very tight at first, as you might give pain and alarm the animal. Be particular and have the throat-latch loose enough, so that when he straightens up it will not choke him. Many horses have been ruined by carelessness in this particular. In gearing him up care should be taken that the check is not too tight at first, lest he should in rearing go over backward and fall on the top of his head; another reason is, that he will thereby yield more readily to the side-reins. The checking up should be governed by the length and form of the neck and shoulders. The side-straps should be buckled just sufficiently to impose restraint upon the

colt. As soon as the colt shows a disposition to yield, the bridle should be removed or the check and side straps loosened. This should be done within *at least five minutes* from the time it is put on. The oftener it is taken off and replaced, for the first three days, the better; not, however, removing it while the colt is sulky and refuses to move his head. A lesson to be taught him here is, that he can not be loosened from the restraint *while he is resisting it.* This will prove useful in all future dealings with the animal. Should he prove unusually stubborn and refuse to yield, you may make use of what we denominate the "Yankee Bridle," a description of which and its use may be found on future pages. At your leisure you may now proceed to the

HARNESSING OF THE COLT.

In the first place, harness the colt and allow him to walk around the yard or remain in the barn about a half an hour, to get accustomed to the rattling of the straps and the feeling of the harness in these unaccustomed positions; then remove the harness. When convenient replace the harness, for a short time, and again remove it. The third time you harness the colt, after he has been harnessed a few minutes, pass the tugs through the ring of the breeching and tie them, drawing the breeching and breast-collar pretty snugly against the body. After a little time you may commence to drive him with the reins, turning him in different directions, and gently urging him forward, impressing

upon him the fact that you control him, thus teaching him to obey the rein and go without leading. Be careful each time to repeat the word "Whoa!" at the same instant you pull up on the reins to stop him. This usually occupies about three days' time. As soon as he appears handy with the reins, you are then ready for

HITCHING UP THE COLT.

If possible avoid hitching him up single. If it is really necessary, however, to do so, be particular to place him in the thills as quietly as possible. As there is no particular danger attached to this transaction, we have no established rule, leaving the operator to be governed by circumstances and his own judgment. Before hitching him to the wagon, rattle the thills, shake the wagon, walk him out and in between the thills, leading him in toward the wagon, unchecking him and allowing him to examine in his own way the object which is so new and terrifying to him. You must accustom him to the wagon or there will be danger. If he continues frightened in spite of these efforts, it will be well to let him go for a while. If after one or two attempts he still continues excited and restive, you may then apply the "Yankee Bridle." For the method of its use see future pages, in which it is explained. The object of its use in this instance is to secure a more perfect control of the mouth, to be of use in case of sudden fright. If properly used twice or thrice it is certain to secure the desired end. You may then hitch him to the wagon,

and drive him very carefully on level ground for a few minutes, for the first few times avoiding backing and turning if possible, being careful for a few days to give only short drives; after which three miles and back will do no harm, gradually toughening the colt to do your work.

Our method, however, and the only one which can be *safely* used, is to hitch the colt up alongside of a broke horse, putting him on the off-side. There are several reasons for hitching on the off-side; one or two will suffice. It is usual to jump from a wagon on the near-side; and in this act, if any accident shall happen, such as yourself falling down, or any other movement to alarm the horse, he may start, and if he were on the near-side he would wheel around *from* you, and perhaps do damage before you got within reach; while if he was on the off-side, he would, if frightened, wheel *towards* you, the broke horse being likely to remain steady. Another reason is, that the operations with the colt have thus far mainly been upon the near-side, and it will not seem quite so strange to him to have a horse on that side.

The harness being on both horses, (quite loosely on the colt,) with long inside lines, you will buckle a short strap around the near hoof of the colt just below the fetlock, with an inch ring slipped on the strap before buckling and left there. Tie a long line or rope to the ring, pass it under the girth of the colt, bringing it up on the outside of his trace, and holding it with the lines

in your hands. You will then drive the team about; as you start them, promptly and decidedly using such word as you choose, never varying from the same word, frequently pulling up the lines and saying "Whoa!" at the same time drawing up on the line attached to the foot, until the foot is lifted from the ground and held there, leaving the colt standing on three legs in spite of his struggles. After a few times doing this, you may unharness him, as that is sufficient for this lesson. When ready to hitch up, which you may now do at your leisure, you will do as before, and after a little driving, hitch the team to the wagon and get in. You now have the foot-strap alluded to, (*see Figure* 3,) passing from your hand between the pole and the colt's near trace, under this girth and fastened to the near foot. You may now start up slowly, stopping the team once or twice while on a walk, saying "Whoa!" as before, and pulling up the foot-strap. You will now readily perceive that you have perfect control over the colt's movements, whether on a walk or run, and without any danger to the colt. The colt will not stumble, strange as it may appear, it being almost impossible for him to fall by this means while in motion. An experience with upward of one thousand colts warrants us in this statement. Short and lively drives are what you now want until the colt becomes wonted and obeys the rein and word "whoa." You may then change sides with him, to teach the *other side of him*, of course changing the foot-strap to the inside each time. When he has by this means be-

Figure 8.

come accustomed to being handled freely, you may then hitch him up single or double, as you choose, for he is now ready to drive.

TEACHING THE COLT TO BACK.

This should not be attempted until the colt has been driven at least eight to ten days, nor until the habit of readily stopping, starting, driving and obeying the reins has been formed. Since we have adopted this rule, no colt under our training has ever been known to balk, throw himself down in harness, run into the fence, or refuse to stand while the driver is getting into the carriage. When sufficient time has elapsed to warrant you in undertaking to teach him to back, you will take a common bridle, or a bitting-bridle is best, and begin by taking hold of the side-reins, standing in front of the colt, and gently pushing backward, saying "Back!" at the time he steps back. This you will repeat until he readily takes two or three steps backward, when you will release him for the present. At the next trial you may put on the reins and take your position behind him, passing the reins through the side-loops of the girth, or, if obliged to use a harness, through the thill-straps, holding the reins well down by his side to prevent him from turning round and facing you. Have him loosely checked. As you step behind him, pull gently on the reins, and as he steps backward say "Back!" and immediately slacken the lines. A half an hour's exercise is usually sufficient at a time, repeating the operation until he backs readily. It is well to give him one

or two sharp, steady pulls, for eight or ten feet backward just before leaving him each time. He is now ready to be hitched up as you usually hitch up your horses, and ready to form the habit of backing to wagon at the word. Be careful for the first few times not to ask him to back with a load, each time having the wagon in a favorable position, such as descending ground, when the attempt is made. By using this caution the colt will soon learn to be handy, and practice will enable him to be perfect. Under all circumstances in handling the colt, *preserve your temper*, no matter how much inconvenienced; for if you lose control of yourself, you will be sure to lose control of your charge. The colt is to be governed by kindness and determination, not by abuse and tyranny.

RIDING THE COLT.

This should not be done until he is well bridle-broke. Begin the lesson in the barn or yard. Place on him a common riding-bridle, without girth or martingale. Tie the bridle-reins together on top of the neck, tight enough to check him a very little. Stand on the near side near the shoulder; throw a webbing or tie-strap across the withers, near where the reins lie. Quietly reach under in front and caress the fore-legs, and as soon as he is sufficiently calmed, tie the webbing or strap to the off-side foot, just below the fetlock. If he is restive, and prevents you from tying it, or shows signs of striking or kicking, take him by the head and

Figure 4.

tail, the left hand well up to the head, and whirl him around two or three times, (*see Figure* 4,) and while he is disconcerted by this movement, stoop and tie the strap. Then take hold of the near rein within about four inches of the head, and with the right hand draw up on the strap so as to pull the foot clear from the ground, at the same time pulling on the rein toward you quite firmly, until he has made two or three hops on three legs. The points to be gained by this are, first, you teach the colt that he is not to be hurt and that he can not get away. This tends to prevent his "plunging" when you afterward attempt to ride him; second, by pulling the strap across the back, it accustoms him to bear a weight upon the back; third, it prevents him from throwing himself over backward; fourth, it accomplishes your desire in a safer and quicker way than any other known. Now take a shorter hold on the web or strap, with the foot held up, passing your right arm well over his back, with the left hand hold of the near rein and mane near the withers, and then make the motion of mounting. Do this a few times until the colt becomes accustomed to the new positions and movements. Then gently mount him, the foot being still held up. (*See Figure* 5.) Now let down the foot and start him along. If he shows signs of being restive or attempting to throw you, pull up the foot and caress him. He will not fall down while the foot is up, as it might be supposed he would. Keep well hold of the foot-strap, untie the knot in the reins, and, letting down the

Figure 5.

foot, commence turning him from side to side and urging him forward. If he is unwilling to start, take a short bow-top whip or switch, holding it in the same hand with which you hold the foot-strap, and gently touch him with it on the off hind-leg, just back of the stifle, gradually increasing the blows until he starts, at the same time loosening the reins. In *turning* him, use caution and do not pull upon but *one* rein at a time, for the reason that, if you pull upon both, the colt will be apt to run backward, sideways, and otherwise act awkwardly. Do not ride him at a distance the first time. This lesson with the foot-strap should be repeated three or four times, until the colt is accustomed to your presence on his back, and your legs against his side. Having never been thrown from a colt since we adopted this plan, we firmly believe that no better method of training a colt to ride is known. We deem the old and tedious process of pelting and coaxing, using blocks, etc., to be entirely useless, as it will be seen at a glance that by this process we run no risk of injury to ourselves or the animal, and at the same time readily obtain entire submission to our control.

TO MOUNT THE COLT.

Take hold of the mane with your left hand, placing the right hand upon the back; then springing lightly, raise yourself upon your wrists until your middle reaches the height of the horse's withers, when as you lean over the horse, with a quick spring you throw your weight upon your wrists, and pulling strongly with your arms

and with a quick spring you throw your right leg over the crouper, and are mounted.

THE HABITS OF THE COLT.

The habits of the colt may be classified under two heads:

First.—Habits acquired through improper training, or bad and careless management after training. A colt which has been correctly trained, if watched carefully and promptly checked at each indication of bad habits, will in a short time become settled and fixed in the right way, and will never, except by extraordinary or willful means, become a bad horse. A colt, however, which is improperly trained is more than likely to acquire bad habits, and it is to the cure of these which the rules we give will call your attention.

Second.—Habits which are *bred.* The class of habits to which we allude under this head have for a number of years occupied our thoughtful attention, and though we have never seen or heard them set forth as important, yet in our opinion a volume might be written upon the subject, replete with facts and suggestions, every one of which would be of immense value to the breeders of horses. As this work, however, is devoted more exclusively to the *training* of the animal, and fitting him for use, we shall content ourselves by briefly giving our reasons for our theory, and making a few pertinent suggestions upon the subject. Close reasoning, and analogy founded upon observation, have taught us that, as the colt is quite apt to inherit the *traits* of the dam or sire,

or both, the same rule applies with equal force to the *habits* and *dispositions*. It is a well-settled fact that certain traits and peculiarities belong to certain breeds of horses, and, if the blood is not crossed, will be inherited from generation to generation. Our application of this established rule is, that the same will apply to *habits*. We might extend our views upon this subject, and describe how inevitably the laws of nature entail *diseases* known to horse-flesh, and give valuable hints upon the danger of breeding from decrepid or unsound stock, were it within the scope of our present subject—the *training* of colts. In reference to the effect of *breeding* upon the *habits* of the colt, we can not, perhaps, better explain our meaning than by the following illustration: Suppose you have a colt which, before he has ever had an opportunity to *acquire* bad habits, should show signs of balking, biting, or kicking. You say, "How came he by it? He has had no chance to learn it." If you will look back to the character of the mare, (possibly the stallion, but oftener the mare,) you will be almost certain to find that she was either a balking, biting, or kicking beast; and by a nearly unerring law you may trace the connection between the two, and charge the bad habit of the colt to the account of one or both of his progenitors. Another point in our theory is aptly explained by the following: Briskly (not roughly) exercise your mare with foal—frequently walk her as rapidly as her gait will allow, and you will have a brisk, fast-walking colt; on the contrary allow her to be stupid

and lazy, and you need not wonder if her colt is equally so. The ready application of this rule to all habits of the mare will be at once perceived, and needs no further argument. There are exceptions to all these general rules, the colt occasionally giving no evidence of his lineage, or extending it back one or more generations; but it has proven itself sufficiently clear to our observation to warrant us in setting it forth as a fact, that much depends, not only upon the constitution and habits generally of the progenitors of the colt, but particularly upon the *habits of the mare while with foal.* We therefore advise precaution in advance, as a preventive of trouble with your animal in after-years.

We calculate that a colt, educated under *our* system, as thus far set forth, has been *trained out* of these *bred* habits, if he ever possessed them. What we now intend is to give rules for *training him out* of such as have not already been eradicated by proper training, as well as to break him of such as he may have *acquired* through mismanagement.

There is much danger accompanying the act of attempting to break bad colts, unless you can proceed upon *safe rules.* Those which we are about to give we consider *certain* to not only effect the object, but also to insure safety of life or limb both to the operator and the animal. If, however, you *vary* from them, and set up plans for yourself, the responsibility is yours.

In carrying out our system in regard to the breaking of the colt (as well as the maturer horse) of bad habits,

without incurring danger, we are frequently compelled to use certain implements; and before proceeding with our lessons, we will give a detailed description of each of these articles. We commence with

THE YANKEE BRILLE.

This consists of a common check joint-bit, with rings at each end, but no bars; the shorter the bit is, the better. Put one of the rings of the bit in a vice, and press it flatwise until a ring of the same size will slip over and on the bit. Slip two iron, steel, or composition rings of about the same size on the bit; turn the flattened ring half around, put it again in the vice, and restore it to its round form. This forms a bit with two rings loose upon the mouth-piece. (*See Figure* 6.) Attach the bit to a common bridle in the usual manner. As you place the bit in the mouth of the horse, have the loose rings one on each side of the mouth. Fasten a strap to one of the loose rings, bring it over across the nose just above the nostril, and fasten it to the other loose ring, drawing it moderately tight. Attach a strap to the brow-band, bring it down the centre of the face, and attach it to the straps over the nose in such a manner as to prevent its slipping down. Take a piece of stout cotton clothes-line rope, about eight feet in length; tie one end to the near-side ring of the bit, pass the other end under the jaw through the off-side ring of the bit, then bring the rope over the neck from the off-side to the near-side, placing it about where the collar usually

Figure 6.

For an Improvement on this Bit, see Appendix to this Book.

Figure 7.

comes; pass it down the near-side, and pass it through over that portion of the rope which is between the two bit-rings under the jaw. Now, as you tighten upon the rope, (*see Figure* 7,) you will perceive that the tendency of the two rings which are attached to the strap over the nose and play loosely upon the bit, is toward the centre or joint of the bit, and that they will consequently press tightly upon the cheek. The sensation which this pressure occasions, you may illustrate by pressing inwardly upon your own cheeks with your mouth partially opened. The effect upon a horse is instantaneous and irresistible. We have spent years of careful study in endeavoring by experiment to ascertain the best method of governing a horse's mouth without injury to the animal. This method is the result of our patient labors. It can not injure a horse, and it is a safe and reliable controlling power.

THE LONG FOOT-STRAP.

Take a soft leather strap, an inch and a half wide and ten inches long, with the inside edges shaved thin, to avoid chafing. Then take a strap of firm leather, fifteen inches long and one inch wide; on one end place a buckle and loop, with a lap of two inches on the under side; on the other end punch holes for the buckle-tongue; place the last-named strap on the outside of the wider strap, in the centre, with one end extending an inch beyond the buckle; then stitch the whole together, commencing at the buckle and stitching two inches, having the loop

pretty close to the buckle; then slip an inch and a half ring, or D, over the outer strap, close up to the stitching; then proceed with the stitching for five inches, and close up. This finishes the strap, which is calculated to buckle around the fore-foot just below the fetlock. A strap or webbing, to tie in the ring, fifteen feet in length, completes the *long* foot-strap, which is used for driving in harness.

THE SHORT FOOT-STRAP.

This is simply a strap or webbing about ten feet in length.

THE SAFETY SHAFTS.

For these procure three poles or scantling, about three or four inches through and twelve feet in length, of tough, stiff wood. Lay two of them down about two feet apart at one end, and twelve feet apart at the other end. Lay the other stick upon the two first poles, across the wider end, near enough to the end to allow about three inches of the top pole to project over on each side; bore holes through, and with an iron bolt or hard-wood peg fasten it strongly to the other two sticks, to form a cross-bar. Take a piece of wagon-tire iron about three feet long, bent in the form of a breast-collar, and rounded on the inside; drill two holes in each end, through which firmly rivet the iron to the inside of the two poles, at the end where they are the nearest together. Just forward of the place where the irons are riveted on, bore holes through the poles, or drive in staples, so that a strap or rope may be attached, to go over the horse's

neck to hold up the shafts. At the back end of each of the two poles affix a "dog," or piece of iron pointed and about four inches long, extending downward, so made as to prevent the shafts being pushed backward, but allowing them to be drawn forward.

The "Yankee Bridle," "Foot-Straps" and "Safety Shafts," are the only implements now necessary to mention. All others required are such as are in ordinary use, as wagons, harness, whip, etc.

Having explained the nature and construction of these implements, we proceed with our lessons upon the habits of the colt, commencing with

HABITS OF COLT IN THE STABLE.

Rolling or Getting Cast.—If the colt is in the habit of rolling or getting cast, tie his halter at a sufficient length to allow him to just reach his nose to the floor tie a strap or rope to the head-stall just back of the ears· tie the other end to a staple in the flooring overhead, about a foot back from the front of the manger. Have the strap or rope of sufficient length to allow the colt to lie down, but not long enough to allow him to lay his head sideways upon the floor. He will not attempt to roll over while the top of his head is held up. This is perfectly safe, and, if persisted in, it will eventually cure the colt.

Crowding or Cringing.—If the colt crowds or cringes upon your entering the stall, you will, as you enter, gently caress him, proceeding quietly to assure him that he is not to be hurt, avoiding loud or sharp words, and feeding him from your hand. If a few attempts do not

improve him, take a long bow-top whip or short fishing-pole, and standing out of reach of being kicked, place it by his side and touch him lightly across the fore-shoulder, each time you touch him saying firmly, "Stand around!" being very careful not to *strike* him so as to *hurt* him, nor to touch him near the flank. By touching him on the fore-shoulder and avoiding the flank, you learn him to stand around, and do not excite him to kick. By not striking him to hurt, you teach him that he is not to be hurt, and that there is nothing at which he need be frightened. Do not get excited yourself, but coolly proceed with the lesson, being sure to stop your whip whenever he shows signs of standing around.

Pulling at the Halter.—If the colt pulls at the halter upon your entering the stall by his side, or by being frightened at hay thrown down the rack, or from other exciting causes, place on him a strong halter, with a long halter-stale, (the halter not fitting so snugly as to be liable to hurt,) and put on him a girth; lead the colt into the stall and pass the halter-stale through the ring or place of tying, seeing that it will slip readily back and forth; then pass it under the girth, between the fore-legs, and tie it to the near hind-foot just below the fetlock, leaving him about three feet play of halter-stale, at the manger. Now carefully put your hay in the rack. If he pulls, he will, of course, lift his hind-leg, which will immediately call his attention to that quarter, and he will lose the fear of being hurt by the hay coming down. If you prefer, you may enter the stall; but as

he pulls, get out of the way by climbing into the manger, as he will plunge considerably. When he comes up to the manger, as he will, caress him and speak kindly. If he is very confirmed in the habit, it may take three or four days to eradicate it.

HABITS IN HARNESS.

Putting on Harness.—If the colt is shy about allowing you to put on the harness, stepping away from you and refusing to stand, upon backing him out of the stall first put on the bridle. If you fear his getting from you while attempting to bridle him, put the bridle on over the halter. Now unbuckle the head-stall of the halter and allow it to drop off, still holding the halter-stale in your right hand; with the left hand now pull the nose-piece over the nose and pass it into the colt's mouth, and as you pull upon the halter-stale, the nose-piece passes around the bridle-bit and the halter comes off. If it is a rope halter, you proceed in the same manner, except that you pull that portion which lies back of the ears over in front, and pass it down through the mouth with the nose-piece. Now lead him to the place on the barn floor where you wish him to stand while being harnessed. Quietly take down your harness from the pegs. If the colt moves from his position, lay down your harness and lead him back quickly and firmly to the same position, not speaking to him until you get him in his place, when you will promptly and decidedly say, "Whoa!" not speaking *too loud*, and being careful

in pulling him around, not to *hurt* him—your object being to teach him to stand in the place in which you put him. You will, *each time* that he steps out of it, lay down your harness and put him back in the same manner, using the word "whoa" each time that you get him there; and as he stands still, caress him about the face and neck. Now quietly take up your harness and reach it toward his side. If he is still restive, reach it around toward his nose and allow him to examine it; then slowly proceed to put on the harness, not being too anxious nor in too much haste. This operation frequently requires patience and perseverance, sometimes occupying half an hour. When the harness is well on, take it off, and repeat the process until the colt will allow you to put it on without flinching. You will find it necessary to give your whole attention to teaching this lesson, as you must watch every attempt of the colt to step away, and act promptly, so as to learn him that he is *not* to step. You also familiarize him with the use of the word "whoa." This will be valuable if not trifled away by using the word needlessly.

Stubborn and Refusing to Rein.—If a colt is stubborn and refuses to be guided by the reins, you will now use the "Yankee Bridle." When prepared, step to one side of the colt, take hold of the "Bridle" about two feet from the head, and give him two or three sharp, short pulls sideways, always when pulling instantly slackening your hold; then go to the other side and pull him in that direction · now alternating sides at each

pull, doing it as rapidly as possible. (*See Figure* 7.) As soon as he yields promptly to your pulling straight ahead as well as sideways, attach to the bit-rings a common bridle-rein, without martingales, still keeping on the "Yankee Bridle," and mount him; ride him about, reining him occasionally, riding him up to the particular places, if any, where he is most inclined to act willful; and if he refuses to yield ready obedience to the reins, dismount and pull as before, quickly and sharply, with the "Yankee Bridle." By this means he will soon be ready to drive up to or by the place you desire. Now put on the harness, with the rope of the "Yankee Bridle" lying loosely across the neck. Take the lines and drive him, and if he is again stubborn and sheers off one side, with the "Yankee Bridle" pull him back where he belongs. This usually takes from three to four lessons, given once a day. Remember and have your colt well fed and carefully groomed, as a colt with this habit is more likely at times to have low animal spirits, and the object should be to increase them. Be patient. It is not within human means to *suddenly* teach the colt what is required of him, "Horse-*Tamers*" to the contrary notwithstanding. Having taught the colt to behave in this particular, you must, when afterward driving him to wagon, at each time there is an appearance of a renewal of the habit, be gentle, and as he comes up to the places which excite the habit, favor him rather than urge him. You thereby prevent the forming of other bad habits growing out of this, such as balking, etc.

Kicking in Double Harness.—A very disagreeable and contemptibly mean habit—one quite likely to be bred, out, if not, sure to have been caused by mismanagement —is that of crowding against the pole, and frisking and kicking while in double harness. To break him of this habit, and in the act of breaking him to form other habits which are of value, take the colt into the barn or yard, and apply the "Yankee Bridle." Step in front of him and pull gently toward you, and as he yields his head to the pressure, let up, (never letting up while he is resisting,) repeating two or three times; then commence pulling with an upward pull, raising the head, increasing the force of the motion gradually. Remember this is one of the most powerful means of control ever placed in a horse's mouth. Repeat until you have your colt ready to be checked up with the check exercising a controlling influence. This usually takes one or two days, not keeping the "Yankee Bridle" on more than five minutes at a time, applying it as often as convenient. Now put on the harness, checking him up as tight as he will bear, and apply the "long foot-strap," fastening it to the near fore-foot, bringing it up under the girth; take hold of the reins and foot-strap, and start him along, pulling up the foot frequently and stopping him, saying, "Whoa!" as you pull up, turning him occasionally about; then change sides with the strap and repeat the operation. Take the long strap off the foot, tie it round the neck and pass it along the near-side of him and put it between his hind-legs, holding the near

fore-foot in your left hand to avoid being hurt. Drop the fore-foot and bring the strap back around the near hind-leg, close up to the body, on the near-side, and pass it through the part tied around the neck, and commence drawing this up. He will probably cringe and be frightened; keep hold of the bridle well up to the head, with your left hand. Keep tightening the strap until he allows you to pull up his hind-leg without struggling; then change to the other hind-foot, repeating the same process. This should be repeated two or three times if he is very spiteful. When completed, the colt is then ready to hitch up with another horse. Hitch him up on the side on which he is in the habit of kicking, with the "long strap" around the inside foot and held with the reins. Walk him along, driving straight ahead, pulling up the foot and stopping him occasionally. Then begin turning him, doing it quickly, and managing to have the pole hit him, at the same time pulling up on the foot, but compelling him to go around. If afraid of the trace, change sides with the strap. This should be kept up for about ten minutes at a time. If the habit should continue, repeat this a few times, when he will recover from it.

Running and Kicking at Dogs, etc.—A colt in the habit of running and kicking at dogs or other animals, or constantly on the look-out for such objects, may be broke nof those habits by applying the "Yankee Bridle," giving him two or three sharp pulls; then harness him up with another horse, (never hitching him up single for

this lesson,) and put on the "long foot-strap." Drive him up to the dog, or other object, having a person holding a dog until he comes near, the dog being tied so that he can not escape, and, as the colt comes near, letting go of the dog and causing him to flounce about in struggles to get away; pull up on the "foot-strap," (*see Figure* 8,) and cautiously compel the colt to approach the object of his fear, and gradually impress upon him that the movements of the dog do him no harm. Your desire being to teach him that there is nothing which need to frighten him, and also to obtain entire submission, you will repeat the process until the object is accomplished. It will be necessary to drive him several times with the webbings on, to be certain that the cure is effected.

Pasture Habits.—Very important habits of the colt in the pasture, such as jumping, running, etc., may be effectually prevented by the following means: Take an old strap halter with a fore-piece, (*old* because it will not shrink,) without the halter-stale, fit it closely to the head, leaving the nose-piece loose enough to allow for a free movement of the jaws; take a piece of common medium harness leather, about ten inches square; on two sides fasten a stout piece of wire six inches in length, placing it so that the ends are equally distant from the corners of the leather; bend the wires in a semi-circular form; punch holes in each corner of the leather and tie in leather strings; place this leather upon the colt's face, the semi-circles up and directly in

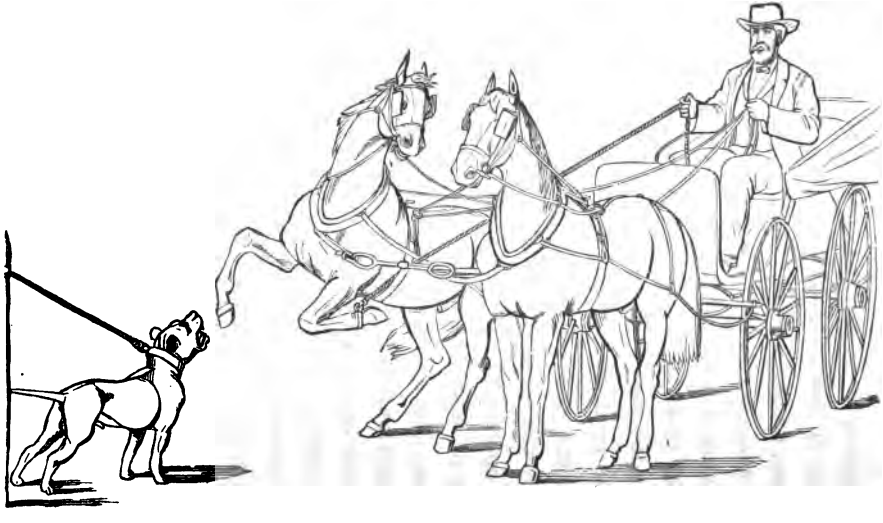


Figure 8.

front of the eyes, tying the strings to the ends of the fore-piece, near the rosette, and to the rings at the end of the nose-piece, or to the sides of the halter. This gives him plenty of liberty to look sideways, but he can not look *ahead*, and so has no confidence to either jump or run, and will do neither. This leather is invaluable to those having the care of *young stallions*, or colts to be trained for trotters. For instance, if the stallion sees a horse in the road and starts for him, he will lose sight of him the moment he turns to start in that direction, and of course goes no further; if to be trained for a trotter, by the use of this leather he never runs, giving a better opportunity for the walking and trotting muscles to be developed.

Another.—Tie a strap to the near fore-foot below the fetlock, pass it up under a surcingle around the body, and tie the other end to the near hind-foot above the fetlock. You will see that, when he attempts to jump a fence, the fore-foot is drawn up under him, and as he springs to leave the ground the hind-foot will be pulled up, and he will inevitably remain in the lot. The value of this plan is that it will in most instances eventually cure a horse of the habit, so as to render the strap unnecessary.

A caution is suggested as a preventive to this habit. In transferring horses from one place to another, they should not be put in a pasture at once, especially if they have been in the habit of having company which they leave behind. The affection of the animal for his mates will induce the attempt to rejoin them, and he may

thereby form the habit. No horse ever jumped a fence for better food, unless he had first formed the habit from other causes.

There is no animal known whose love of home, or affection for his kind or acquaintance, is as strongly developed as in the horse. It is a marked characteristic in this animal, and is one of his strongest impelling motives. If a horse, recently removed from a neighbor's, escapes your possession, you instinctively look for him at the place from which he came, and you usually find him there. Therefore give him no opportunity to escape, until the impression is in a measure forgotten by the lapse of time. There are times when the desire of the animal for company is greater than at others. By taking him up and securing him at these times, he has no opportunity of forming this unpleasant habit, whereas if then allowed to run in the pastures, some exciting cause may impel him to jump, and once he finds he can escape confinement by jumping, he is quite apt to repeat it without any particular cause.

This concludes our account of the habits of the colt and their treatment. Of course we have not spoken specifically of *all* the minor habits, but in the main ones which we have given, there are a sufficient number of rules laid down to guide the sensible operator to the proper remedy for such as are not named. Remember that the colt is being cured of habits which are either *bred* or are caused by *nervous fear*, and not, as a general thing, the result of willfulness on his part.

SHOEING THE COLT.

To prepare a colt for shoeing the first time, tie the "long foot-strap" (*see Index*) around the neck, pass it along the near side, between the hind-legs, and bringing it around the near hind-leg close up to the body, pass it under the strap around the neck; then draw upon the strap, holding him meanwhile by the bridle; the colt will probably be nervous at the pull, and you will loosen it and caress him over the face and neck, gradually tightening at each successive pull, using no words but gentle ones, and *not* saying "Whoa!" When he has become accustomed to it, lower the strap to a point just above the hock, and gradually pull upon the strap until you lift the leg, at the same time pulling upon the bridle with a side or back pull to prevent his stepping forward. When you have thus succeeded in easily lifting the leg pretty well up, you will find that you can take it up with your hand and hold it. The same process must of course be gone through with on the other leg, and after about ten lessons your colt is ready to go to the blacksmith. The rule has usually been to take the colt to the blacksmith first, but he is more than apt to get bad habits by being forced into position to be shod, and probably gets pounded to his injury if the blacksmith's stock of patience is not very large. Shoeing should always be done as the feet grow tender, and, if quite young, shoe *very* often.

HINTS ON THE COLT.

In teaching the colt *words*, always accompany the

words with an explanatory *act*—something which will call his attention to the connection between the word *and* the act; for instance, in saying "Whoa!" always pull upon the reins or foot-strap. *Never* use words, either in or out of the barn, except for a *purpose*. Such words as "Stand around!" "Take care!" etc., are proper to be used when occasion requires, but you should not say "Whoa!" when you mean "Take care!" in approaching the colt, nor "Whoa, back!" when you mean either one or the other. It is well known that it is difficult for a person to control himself in this particular. We therefore *strongly* impress its *importance* upon those having to deal with colts.

Always use a short joint-bit with long bars on the colt, on account of teaching him the right place for the tongue, etc.

Kickers in harness should always be checked high.

The colt should be caught with your hands and held at two days old, and tamed before haltering; haltered and taught to lead at between two or three months of age; broke to harness from two to three years of age; broke to ride at three years old; and not to be worked until five, nor hard-worked until seven years old. A mare may be worked one year younger.

The whip should be feared rather than felt. Whenever used it should be accompanied with the proper words, and its meaning understood; use the whip only to insure *promptness*—not to teach.

EDUCATION OF THE HORSE.

In treating upon this subject we are well aware of the difficulties under which we labor. We are conscious of the fact that we are quite apt to excite the prejudices of men who, having managed horses to a considerable extent, and having ways of their own with which they are satisfied, are likely to cry "humbug" to any idea which to them is new and strange. We are also aware that there already exists in the minds of many intelligent persons a settled opposition to all professionals whose business is pretending to improve the Horse—an opposition arising from the many failures among that class, and the consequent damage done to their animals by being handled by such men, or under their instructions. We have no reason to expect that *we* can obliterate these prejudices entirely, but we have faith to believe that if we are given a careful hearing, and our advice put into practice, we shall do much to improve the opinions of the people upon the subject of the "*Education of the Horse.*" We do *not* expect to improve their opinion of "Horse-*Taming.*" *It* may be of some service,

but, in common with thousands of others, we fail to see it. The distinction between *taming* and *educating* is clear and positive, and can not be gainsaid by even the most careless observer. We think we have made this sufficiently clear in previous pages, but desire to impress the point, as it is on account of the "Horse-*Tamers*" that the existing prejudices have mainly arisen.

We have devoted our lives to the investigation and study of this subject, and whether our efforts have been of any value to the public or not, we are certain of having had a very extensive *experience* with horses. We do not by any means claim to be infallible, but we speak of this to satisfy the public that ours is no system picked up in a day, but that it is the result of incessant labor for years. Of one thing we *can* assure the public, that, whether the ideas we advance are original with ourselves or whether they are ideas of others adapted to our system, neither are recommended without first having been put thoroughly to the test by *actual personal experience*. We advise no plan which we have not successfully tried, and found to be valuable.

There is a certain moral responsibility resting upon the author of works of this nature, which is embarrassing to a high degree. The rules which he sets forth are sometimes deviated from without the knowledge of the operator himself—either from his not clearly understanding the meaning, or from his having too loosely scanned the printed instructions—and the desired result is not reached. This leads to a distrust of the system.

Occasionally, too, circumstances may arise in the handling of the horse which no foresight could have provided against, and if the operator does not find in the book a remedy for his difficulty he lays it aside in disgust Nevertheless we submit our work, confident of being able to be of some public service.

We have heretofore, in this volume, treated almost exclusively upon the education of the colt and the treatment of his habits. We now come to speak of a subject which in almost all its aspects needs to be treated from an entirely different stand-point. The colt is impelled to his awkwardness and bad habits by natural impulses of timidity and consequent fear, while the mature horse is actuated more by a strong self-will, his habits being formed through ignorance or negligence of his keeper; therefore the rules which apply to the education and treatment of the colt are not, in all instances, the rules necessary to be observed in the education and treatment of the horse. Such governing rules, however, as being *honest* with the animal, exercising *kindness*, *forbearance*, *firmness*, and *perseverance*, apply in both cases.

In the *education of the pleasure-horse* there are many points of value to which allusion might be made, which the limits of this work will not permit. We shall, however, touch upon those of the most importance in everyday use. Bear in mind that, to make the lessons which we are about to give effectual, it will be necessary to give one or two lessons each day, for a few days, until the habit of obedience is confirmed.

TO CAUSE THE HORSE TO FOLLOW YOU.

To cause him to follow you while his head is confined with a bridle or halter, put on the "Yankee Bridle," (*see Figure* 7,) take hold about two feet from the head, give him a few short, quick side pulls to the right and left, (*see Figure* 7,) then taking quickly hold of the rope farther toward the end, as you step back say decidedly, "Come here, sir!" If he comes forward, caress him; if he does not come, give him a pull with a sideways tendency, and repeat the attempt to have him come forward, until he does come; then start off either to the right or left, with the rope slackened; if he does not follow you, give him more pulls sideways, and try him again. With an ordinary horse, you can teach the lesson in ten minutes, so as to be followed by him when you are near the head. Step partially behind him, laying the rope along his back, and say, "Come here, sir!" He will not be likely to do it, because he has only been taught to go *forward* at the words. To teach him to follow you in this direction, you will then chirrup to start him, repeating the words. If he comes, caress him; if he does not come, or moves in the wrong direction, pull upon the "Bridle," caressing him as he obeys. The same rule will apply to any direction in which you wish him to follow you. It is quite necessary to teach the horse this habit, as it is the foundation of many others, and is one of the most valuable which the horse can possess.

To teach him, for your amusement, to follow you when entirely loose, put on the near fore-foot the long

foot-strap, and place on him a girth; pass the strap under the girth, and, holding the end in your hand, step away from him; then step toward him, and if he attempts to step away from you, pull up on the strap and say, "Whoa!" If he stops, step up and caress him; repeat until he will allow you to step up to him without moving away. Now take a short blunt whip in your right hand, and the strap in your left, standing by his side; pass your right arm over the withers and gently touch him on the off-side of the head; if he starts to move off, pull up on the strap and say, "Whoa!" When he turns his head, caress him, gradually with the whip forcing him to turn his head around toward you; when he will do this every time you put the whip over, you may remove the foot-strap, and practice him in the lesson until he will come to you every time you lay the whip across his neck; then put on the foot-strap again, put your whip in the same position and hit him in the same place quite hard, at the same time saying, "Come here sir!" After a little he will be very prompt; then place him in a corner and step off at a distance of eight or ten feet and say, "Come here, sir!" If he comes, caress him; if he does not come, hit him gently on the breast with a long whip; he will perhaps struggle to get away, and if he attempts to get out of the corner, pull upon the strap. When he faces you, step up to him and caress him, placing him back in the corner, and repeat; if he finally shows a disposition to follow, step back coaxingly, and when he stops, caress him; at each further repetition use

the words, "Come here, sir!" at each motion of the whip; in this way he will soon learn to follow you at the word, if you have a whip in your hand Don't take him out of doors to practice until he is quite perfect, and then beginning in small yards and alone.

TO ADD STYLE.

Take a common three-strand cotton rope, manufactured of as fine material as you can procure, about three eighths of an inch in diameter, very strong, and about ten feet in length. Tie a knot at each end—an ordinary hard knot with the end passed through the tie *twice* instead of once is proper—slipping it down close to the end. A knot tied thus will not untie; a *single* tie is in danger of slipping out. About the middle of the rope tie a common bow-knot, not drawing it tight, however; pass the opposite end through the loop of the bow-knot, barely passing the knot at the end of the rope through the bow; then pull the bow out as you would to untie it, drawing the rope through the place occupied by the bow, and then draw the knot tight. You will thereby form a loop at one end of the rope, of the proper size to go over a horse's neck. Standing by the near-side of the horse, near the neck, take the large loop in both hands, pass it over the head and well down on to the neck, the same as a collar is put on. This loop should be of a size to fit the neck closely, when in that position. Pass the end from front to back through between the rope and the neck; then place the running loop thus made in the

mouth, back of the bridle-teeth, and draw upon the rope. This will cause the rope to slide through the mouth. Now step in front of him with the rope in your right hand; give him a gentle pull by raising your hand; you will observe that this is a powerful and effectual means of checking up the horse. By a repetition of this for a few times he will become accustomed to raising his head gracefully at each gentle pull upon the halter, and through the control you have acquired over his mouth. When you pull up on the lines to drive him, he remembers his lesson, and will need no check-rein to exhibit style in the head and neck.

If he is inclined to put out his nose, pull down on the bridle, caressing him as he yields freely to the pull; then put on the martingales, having them rather short, and drive him thus for a number of weeks. After the habit of curving his neck is formed, then apply the rope, and teach him to hold his head and neck up, by the upward pull, leaving off the martingales. You can as well have a *showy horse* as an awkward one.

TO LIE DOWN.

Take the "Short Foot-Strap," (*see Index;*) standing on the near-side with your right hand throw it over the back, and with your left hand bring it under and tie it to the near fore-foot; tie a knot in the bridle-rein on the back of the neck; with your right hand, pulling over the back, pull up the near fore-foot under him just back of the fore-legs; with your left hand hold firmly upon the bridle-

rein near the head; if he attempts to jump, pull him around toward you a few times. He will soon cease his efforts to escape, when you will ease up and caress him, never letting loose, however, while he is struggling to get away; pull upon the strap as before, and with your left hand pull upon the bridle rein near the knot on the neck so as to turn his head from you; then gently but firmly bear down on his back with your right hand until he comes down upon his knees; shift the left hand so as to pull his head toward you, and crowding against him, hold him firmly until he lies down, causing him to lie down from you; pull his head well up toward you and step over him; pass the end of the foot-strap which is in your right hand through the ring of the bridle-bit, and pull the head up and over, and hold it; he can not get up while in this position. Hold him thus a short time, and pulling the strap out of the bridle-bit and stepping away, say, "Get up!" and crack a whip or chirrup. This process does not injure the knees, and after a few times repeated he will lie down readily; then pull up the foot with the strap as before, and whip him across the knees until he kneels and lies down. Practice with this will accustom him to lie down at the motion of the whip.

TO SIT UP.

When the horse is lying down, as in the previous illustration, take the "Long Foot-Strap," (*see Index*,) and passing the centre of it over his neck, bring the ends

between his fore-legs, and pulling him over flat on his side, fetch his hind-legs well up under him and tie them with the ends of the foot-strap; then saying, "Sit up!" as he attempts to rise, use all your strength in pushing back on the bridle. He will come into a sitting posture. This repeated sufficiently often will teach him to sit up in the same manner, without the use of the strap, at the word of command.

TO SAY NO.

Stand by your horse near the shoulder, holding a pin in your hand, with which prick him lightly on the withers, and to drive away which he will shake his head. Then caress him, and repeat until he will shake his head at the motion of your hand toward his withers.

TO MAKE A BOW AND KISS YOU.

Stand as before, and with a pin in your fingers, prick him lightly in the breast as if a fly was biting him. He will bring down his head to relieve himself of the supposed bite. You will caress him and repeat. If he looks or acts cross, scold him. He will soon nod each time you put your hand toward his breast. Now place an apple, or some dainty for the horse, upon your cheek, and holding it toward him, say, "Kiss me!" He will take the apple from your face. Repeated, he will put forth his mouth when you turn your cheek toward him and say, "Kiss me!" You may, when the lessons are perfect, say to the horse, "Will you kiss me?" and cause him to bow; then turning your cheek and saying, "Kiss me!" he will kiss you.

HABITS OF THE HORSE.

HAVING already made sufficient allusions to explain our theory and practice, with the reasons therefor, we proceed to our lessons upon the habits of the horse. In these there is frequent use for the "Yankee Bridle," and as it would occupy too much space at each allusion thereto to give the manner of its use, we refer the reader to the explanations under its proper heading. (*See Index.*)

We here take occasion to allude to a fact in connection with the use of this "Bridle," which if properly understood and appreciated will be valuable to the operator. The seat of the main means for exercising a controlling influence over the horse is the *mouth.* Get a *governable mouth*, and your mastery over the animal is more than half accomplished. All horses with bad habits have bad mouths, and you must give a practical force to the theory that it *is* the mouth to which you are to apply your governing forces, before you have succeeded in gaining a right to ask the horse to obey your will. Having governed, we may then proceed to teach, but not till then. Remember that for every habit

there must be a separate application, and while this "Bridle" (which is so effective in controlling the mouth) is used in only one way, there are *as many different meanings* to be attached to its use as there are different habits to be cured, or lessons to be taught. Its use, therefore, prepares the mouth and head for the common bridle to carry into effect what is so well begun, and to give practice until the bad habit is broken up or the desired new one rendered permanent. The "Bridle," to accomplish so much good must of course be a powerful instrument, and *caution* must be observed not to use it to such an excess as to excite the animal to anger. Another implement which we find very serviceable in connection with breaking up the bad habits of the horse is

THE OVERDRAW CHECK.

Many horses are addicted to the habit of carrying a low head, tossing the head up and down, curving the neck so as to interfere with breathing while traveling rapidly, etc., for remedying which there are many resorts; but the readiest and most handy one to accomplish the most general results, is what we denominate the "*Overdraw Check.*" As it is somewhat difficult to describe the manufacture of this check, we will commence by suggesting that you put a common check-bit in the horse's mouth, tie a string to the near-side ring, pass it up over the face between the ears, and let it hang down on the off-side of the neck to the place where the gag-runner should come;

tie a similar string to the ring on the off-side of the bit, and bring it in the same manner over the head and down the near-side. You will thereby get the proper length, and by attaching the strings together at the point where they cross the face, you will have the measure to the place where the straps of the check are to join from the bit. Take the measure from the horse which is to wear it. Take a strap about an inch wide, the length of the strings, allowing for a buckle and loop; slit the leather up as far as the point where the strings crossed, leave a half an inch, then slit the leather the rest of its length. Attach a buckle to each of the shorter ends, and form a gag-runner on each of the longer ends, rounding the leathers. Buckle your shorter ends to your check-bit. Take your head-stall, and an inch each way from the centre on the top of the head place a loop; put the bit in the mouth, and pass the longer ends of the "Overdraw Check;" through the loops on top of the head-stall; then attach an ordinary check-rein, with buckles on both sides, to the check-bit, and pass it through the gag-runners on the end of the "Overdraw Check," (instead of those usually belonging to a head-stall;) just before the point where the check-reins join the check-hook fasten the check-rein together with a rivet, so that, when hooked on, it can not slip back and forth through the check-hook. Care should be exercised to have the check-rein properly tightened. This will have a tendency to throw the nose out, giving the horse breath and a graceful carriage

The driving-lines must be attached to an easy bit, additional to the check-bit. (*See Figure* 9.)

KICKERS IN SINGLE HARNESS.

Take the "Yankee Bridle," and give him a few *strong, lively pulls* to fix his attention upon your movements. (*See Figure* 7.) Handle him sufficiently in this manner to cause him to follow you, back, stop, stand, etc., as per previous instructions; in other words, exercise him until you gain perfect submission, and get a good control of the mouth. Having this accomplished, you may harness him, and place upon him one of "*Rockwell's Safety Lines*," which is made as follows: Take a common blind bridle, with a double ring-bit, (*see Figure* 6) instead of the ordinary bit. Attach to the loose rings the "Overdraw Check," (*see Figure* 9,) the round portion of the check-rein to pass through the gag-runners of the "Overdraw," the flat portion which usually belongs in the check-hook to be only about a foot in length, so that the check-rein will lie upon the curve of the neck; the loop which is made on the check-rein of the "Overdraw" by riveting the flat strap together at the centre, to be one inch from the centre to the off-side. To this loop attach a common driving-line; pass it through the off terret, in connection with the rein, the end being held in your hand. You will readily see by testing this, that if the horse cringes, and attempts to kick, or to run away, you can, by pulling upon the extra line, throw his head in the air in such

Figure 8.

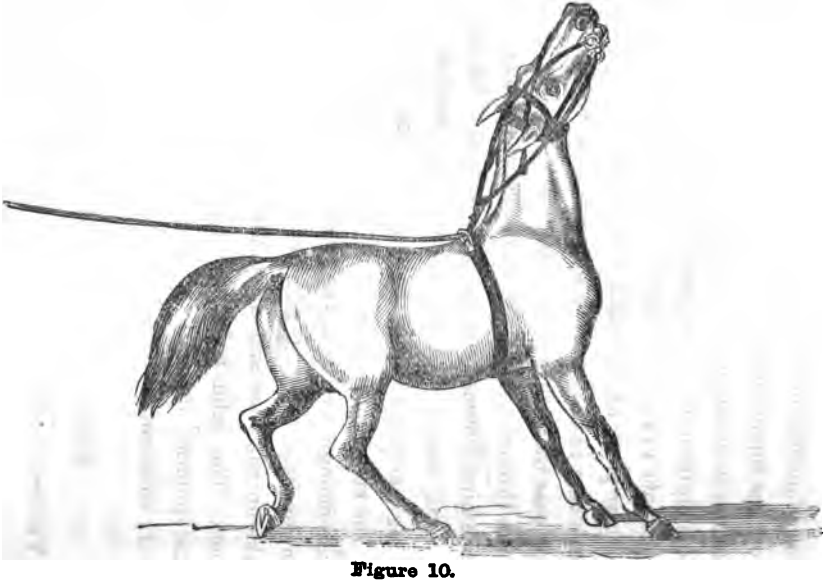


Figure 10.

a manner as to positively prevent him raising his heels. (*See Figure* 10.) This is equally applicable in double harness. Another plan is to take a half-inch rope, about twenty-four feet in length; place the centre of the rope across the top of the horse's head just back of the ears, fastening it to the head-stall pass the ends through the bridle-bit from the outside, and pass them up through the gag-runner; (if the gag-runners are not quite strong, supply their place by fastening a strap about one foot long, with a ring in each end, to the head-stall, over the head;) then pass them through the terrets with the reins, and thence through a ring fastened on the back-strap just back of the hips, fastened strongly and so that it will not slip forward, seeing that the crouper and back-strap are strong; now hitch him to a dray or job wagon, and tie the ends of the rope firmly to the thills, pulling it snug enough to check the head up as high as he can conveniently carry it and travel. (*See Figure* 11.) Take up the lines and drive him carefully the first few times. The habit being now probably broken up, you must practice him until he is safe, and he will then be ready to hitch up to a light carriage.

KICKERS IN DOUBLE HARNESS.

The best method for double kickers is to use the "safety-line" (*see Figure* 10) as described with "single kickers." Another plan is to use the same means to gain submission which are described in alluding to kickers in single harness. Then put on a harness, and add to your

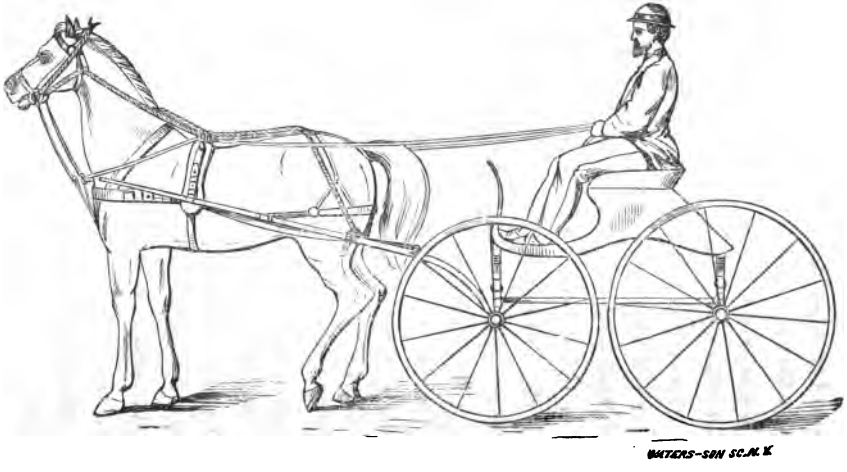


Figure 11.

common head-stall the "Overdraw Check." (*See Figure* 9.) Instead of passing the driving-lines through the martingales, pass them through the "Overdraw" gag-runners, and thence through the terrets. Have a strap attached to the bit, and have a person go ahead of the horse about ten feet, with the strap loose, until the horse attempts to turn, when he will pull up on him. You take the lines which pass through the "Overdraw" gag-runners, and, standing behind the horse, start him up; then jerk upon the lines, saying, "Whoa!" and stop him; then, saying "Get up!" you will start him again, and repeat the jerk and the stopping. (*See Figure* 12.) This is to be done with considerable energy and activity, urging him with a whip if he refuses to go, and repeating until the horse will start and stop at the word of command without the use of the lines. Two or three lessons will probably be sufficient, when you will place him alongside his mate in double harness. Take a small rope, about twenty-five or thirty feet in length; fasten the centre of the rope to the head-stall, on top of the head, between the "Overdraw Check," which should be already on; pass the ends down through the rings of the "Overdraw" bit, back up through the gag-runners of the "Overdraw;" pass them through the terrets, and then through a large stout ring which is fastened to a strap that should go under the tail in addition and similar to the crouper, the ring to be tied down to the back-strap; pass the ends down and tie them to the ends of his single whiffletree. In this position he may be driven and

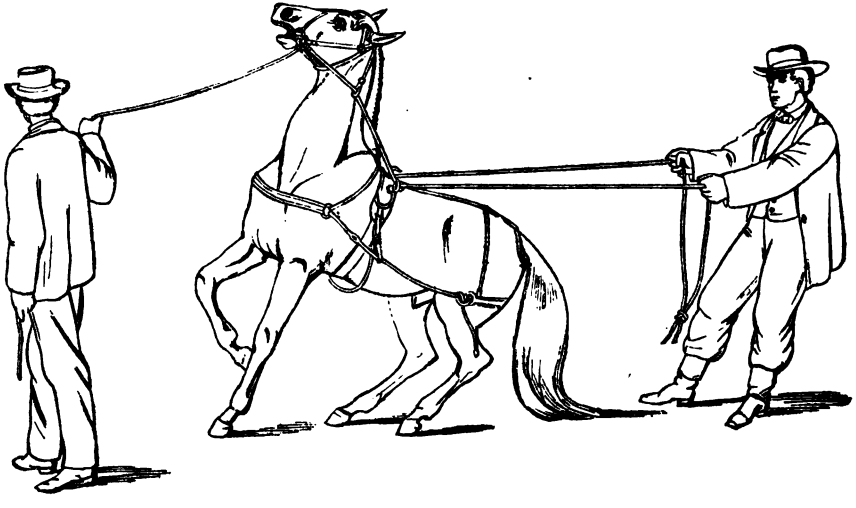


Figure 1

worked with perfect safety, and after a few attempts at kicking he will so far abandon it as to be under the control of the common driving-lines. Be careful and not tease or annoy a kicking horse. Gentleness and quiet treatment, accompanied with a sure control, will always effect a cure.

Another plan, which we have formerly advised, and which has proved quite successful, is to put on a strong strap halter, with a pulley or ring in the end of the halter-stale; pass it over a girth and under the body; pass your hands quietly upon the hips and down the hind-legs, and buckle a strap with a ring on around each; tie a rope or strap to the rings, passing it through the pulley or ring at the end of the halter-stale. Then let up on the bridle and start him along. He will probably kick and flounce considerably, when you must hold him firmly. As soon as he becomes quiet, caress him, and speak to him gently. Lead him along, and you will find, after a few attempts, that he will become reconciled to the gearing, when you may take it off. Keep cool yourself, and show determination by your acts; for if you hesitate or show doubt, the horse will be sure to know it, and your labor will be materially increased. Repeat the next day, and you will find him very much improved. During this process, as well as all other efforts to break up bad habits, where the horse is to be severely exercised, keep him in good feed, and give him the best of care. If you break a horse of habits while he is in low feed and has but little ambition, they may develop

themselves afterward when he is in high feed and fine spirits.

There are other methods of accomplishing the same ends which we have used, but those we mention we consider the best. Among those we have discarded is one of putting a strap around the neck, and attaching the strap from the hind-legs to that, instead of a halter. We are informed that some person is lately pretending to have a patent upon this plan; but we used it years ago, until we had learned better modes.

KICKERS WHILE HARNESSING.

Put on "Yankee Bridle," (*see Figure* 7,) and give him a few sharp pulls, and, standing by his shoulder, draw it up *very* tight, tying it with a half-hitch. (*See Figure* 13.) Under all circumstances keep hold of the end of the "Bridle" when it is thus tied, to be enabled at any moment to pull out the tie if occasion requires. In this position you need not fear his kicking. Put on the harness quietly, being particular in handling that portion of the harness in the rear, very gently. Few people understand *why* a horse kicks while being harnessed. The reason is simply this: he first kicked from being hurt by the harness being thrown too heavily upon him, or from some other injury or careless movement. Upon kicking he has probably been struck with the pitchfork or some other handy weapon The horse, as far as he has any ideas upon the subject, gets the idea that you strike him because he does not kick hard enough, and he tries to satisfy you by kicking with all his might.

Figure 18.

With a motion of our whip we can make our horse *Tiger* kick without fail, because we have taught him this. It is teaching the same thing to your horse when you strike him, and he soon *learns his lesson* so well that he will kick at the motion of taking up the harness. He has learned to associate the harness with injury to himself, and he supposes kicking is what you want; consequently, the harder you strike the harder he will kick. To teach him a *different lesson* you must place him in a position where he can not kick, and proceed to handle him gently. Now ease up on the rope and caress him. If he is so bad that the feeling of the harness then induces him to kick, before he can do so, if possible, pull up sharply upon the "Bridle." A few quick pulls will divert his attention to his mouth, and he will begin to find that nothing hurts him in the rear, and he will stop trying to kick. Loosen upon the rope and lead him around; perhaps half an hour may be necessary before he becomes perfectly reconciled; then remove the harness. Put on the "Bridle" *every time* you harness or unharness him, for the first few days. You will perceive a manifest improvement by this time, and you may now give practice to the lesson, by putting on the head-stall first when harnessing, hooking the check-rein into the check-hook before putting on the harness; then, if he shows signs of kicking, you will gently pull on the check, which, reminding him of the "Yankee Bridle," will cause him to hold up his head and forget his other troubles; as you gently put the harness on the back and proceed

to buckle the crouper, you have the same control by means of the back-strap. Keep this up until you are satisfied of there being no further need of this precaution, being watchful in putting him into the thills, etc., that he is not hit hard or unnecessarily excited. Have him very carefully groomed and handled. A horse that is not a very bad kicker will probably be broke with much less trouble than we have alluded to—the lesson we give in this, as well all other cases, being adapted to the *worst* ones.

KICKING WHILE GROOMING.

A patient and careful man is best calculated to cause a change of this habit. The horse with this habit is always afflicted with too much nervousness, augmented frequently by heedless handling. Put on the "Yankee Bridle," (*see Figure* 7,) and treat him the same as the "kickers while harnessing," drawing it up tight and tying. (*See Figure* 13.) Then take a currycomb and commence currying him upon the neck, gradually approaching the places where he is tender, when you will very softly and gently pass the currycomb over the places. He will not be able to kick, and will stand tolerably still. After two or three times currying, you may proceed without the "Bridle" being drawn up tight, but as you approach the tender places give him a slight pull, having the end of the rope held in your hand for that purpose, and each time he cringes or shows signs of kicking, pull up sufficiently to attract his attention to the head,

and curry with a lighter hand. Convincing him that he is not to be hurt soon allays his nervous fears, and he will yield to your control. If the habit is just being formed, apparently pay no attention to the horse's movements, but be *sure* that your currycomb does not *hurt* him.

KICKING AND STRIKING WHILE SHOEING.

The blacksmith should always use every precaution necessary to protect his life while shoeing strange horses, and if there are any signs of viciousness, should at once take steps for his own protection, proceeding according to instructions in the following lesson, as far as his judgment warns him is necessary. The rules we give are to apply to the worst and most vicious animals. Take hold of the halter-stale within a foot or two of the head; with your left hand pull his head toward you on the near-side, and, by a rapid motion with your right, catch firmly hold of the tail, and instantly commence whirling him around, pulling the head toward you. (*See Figure* 4.) Whirl him three or four times around and stop, stepping quickly up to the head; before he has had time to get over his confusion and dizziness, repeat the whirling operation, and while he is still laboring under the effects of the whirl, strap up his near fore-leg; put on the "Yankee Bridle," (*see Figure* 7,) and step out in front of him. There is no danger now of his striking you. Use him sharply with the "Bridle," pulling earnestly and vigorously to and fro, and leading him around

on three legs, until you are confident that you have completely discouraged him. See that the cord is well down on the neck, and draw up tightly on the rope and tie with a half-hitch. (*See Figure* 13.) Never keep the head tied down in this manner more than two or three minutes at a time. If you are not through, loosen up and tie again. Take a hammer and strike a few times upon the foot which is strapped up, at the same time handling it. When he grows quiet let down the foot and take up the off fore-foot, by throwing the webbing over the neck, tying it, and drawing up; then hammer that foot in the same manner until he allows you to hold it without trying to get it away, then let it down. This will do for horses which strike while being shod forward, provided the "Bridle" is kept drawn tight. For kickers, an additional precaution is required. Take the "short foot-strap," tie it around the near hind-leg, about six inches above the fetlock, (where the blacksmith usually takes hold of the leg,) with a slip-noose knot. Take a short hold with the left hand upon the "Bridle," loosen it, and, with the right hand upon the foot-strap, pull him around two or three times. Have some other person hold him now by the head, and step back and pull upon the foot-strap, backward, sideways, etc. In an experience, during our travels, with thousands of vicious horses, we found but three horses which the above plan did not bring to perfect submission. Those were brought to terms by taking the "long foot-strap," tying it around the neck with a slip-noose knot, (placing it well

down on the neck,) passing it between the fore-legs, bringing it around the near hind-leg just above the hock, and passing it through the portion around the neck. This prevents the rope tightening around the neck, and gives you a means of holding the hind-leg, which will prove perfectly convincing to the horse that he is over-matched. Pull up the hind-leg with one hand and on the "Yankee Bridle" with the other. If time is important, you will find it advisable to shoe him while thus held, which can be done with a little inconvenience, changing the strap as you change legs. Every time you do this without hurting him goes to help cure him, which can not, however, be done in less than five or six days. These same rules will apply to mules, though mules are controlled easier.

KICKING ON ATTEMPTS TO ENTER STALL.

Use a stout halter. Take the "Yankee Bridle," (*see Figure* 7,) placed on as usual, except that the rope should, in this case, be tied on the *off*-side ring of the bit and passed through the *near*-side ring, and without being thrown over the neck. Lead him into as wide a stall as convenient, tie the halter-stale rather long, and as you come out draw slightly upon the rope of the "Yankee Bridle," bringing the end out with you, and hanging it in some handy place. When you have occasion to enter or go near the stall, take hold of the end of the rope, (*see Figure* 14;) and if the horse kicks and squeals, pull up on the rope, being careful not to pull

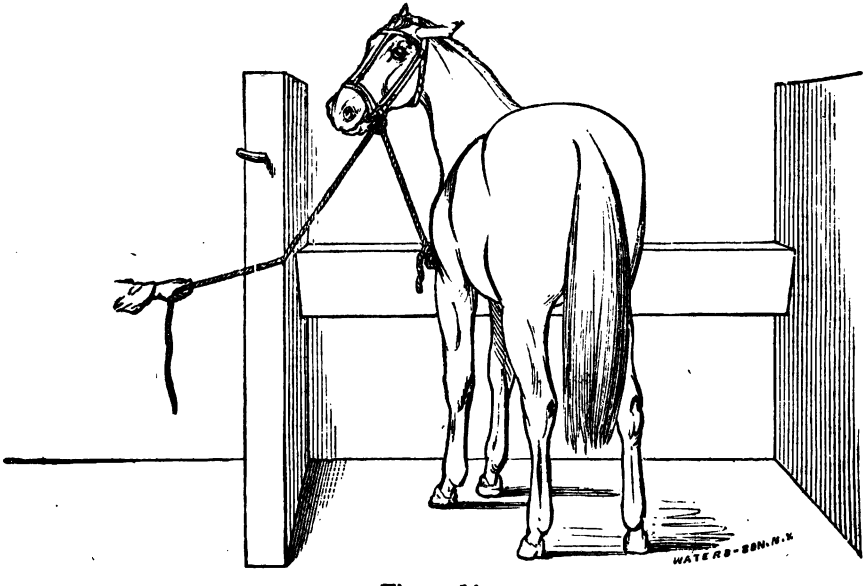


Figure 14.

too hard. This will have the effect to make him stop kicking. In a short time he will have learned that to kick is to be brought up by the rope, and he will cease it altogether. After having pulled and entered the stall, remember and caress him, impressing upon him that he is not to be hurt by your entrance. You will thus not only teach him better manners, but win his confidence. Never strike or shout at a horse while you are entering the stall.

BALKING IN DOUBLE HARNESS.

Apply the "Yankee Bridle" (*see Figure* 7) frequently for about two days, using it vigorously. After the first day put the rope up over the top of his head. In pulling him to and fro you need not be very gentle; on the contrary, be severe, after each side-pull pulling him straight ahead, impressing upon him that he *must* move along whenever any thing presses upon the head and mouth. He must be kept in ignorance of his ability to resist after you once commence breaking him of the habit. Start with him, and when half through neglect him, and let him balk again, and you lose nearly all the ground gained. You must therefore be sure that you *can* do what you try, and be certain that you *do* accomplish every movement which you undertake. Now, if the horse shows signs of being angry, put on the "Yankee Bridle," with the rope, as in *Figure* 14. Tie a knot in the end of the tail; part the hairs above the knot, and pass the rope of the "Yankee Bridle" through the

opening, pulling it up until it draws the head pretty well around, and tie it with a half-hitch. Then with a whip start him around, (*see Figure* 15,) and as he whirls hit him first over the face with your hand, then with the whip around the legs, until he has whirled about three times around, when catch hold of the end of the rope and untie it. Do not let him whirl too much or he will become so dizzy as to fall. This is a powerful controlling influence, and in our hands has frequently been sufficient of itself to break balky horses. Now take hold of the "Yankee Bridle" and lead him along. This will suffice for this lesson, repeating it, however, frequently each day for three or four days. He is then ready to hitch up in harness. Place the balky horse on the off-side, (if on the near-side, of course reverse the whole operation.) Take a soft, stout half-inch rope, about six feet in length; tie a small loop, just large enough to slip on the under jaw at one end of the rope; put the loop on the horse's jaw, (regardless of his tongue;) pass the rope up the off-side of the neck, close to his ears, over and down the near-side, through the loop on the jaw. Tie a strap from the hame-ring on one horse to the hame-ring on the other. Take a stiff, stout pole, and eighteen inches from one end tie it firmly to the inside end of the true horse's single-tree; lay it across the strap running from hame to hame; tie a strap from the true horse's shoulder to the pole, so that the pole can not get more than half-way over to the balky horse; have the pole project a little beyond the horse's mouth,

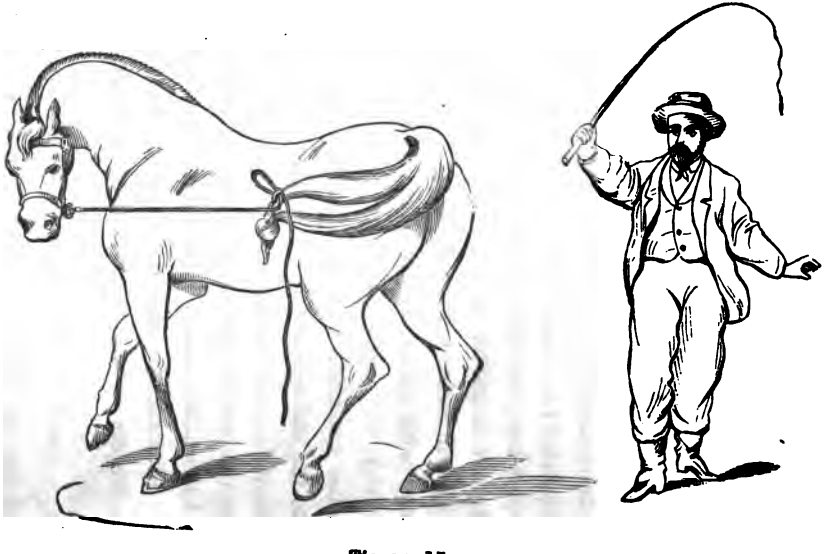


Figure 15.

and tie the rope to the end of the pole, leaving only just sufficient slack on the rope to allow the horse to travel without interference from it while in his place. You will see that as you now attempt to drive, if the horse balks, the true horse will, in pulling his single-tree forward, pull with the end of the pole upon the rope, and remind the balky one that he *must* move; the strap from the shoulder of the near horse to the pole will prevent a side draft, and the eighteen inches projecting over at the rear end will, as the true horse pulls up, slide along the double-tree, and keep the weight of the pole from pressing the single-tree down. A few times practicing with this will remove all desire to balk. You may work the team with this pole on, never overloading. (*See Figure* 16.)

Another good way to start a balker is to tie a stout strap to the inside hind-leg of the balky horse; bring it over the pole of the wagon, and tie it, moderately tightened, to the true horse's collar. As the true horse starts up, and the balky horse lags back, the pull upon the leg attracts his attention, and in his struggle to release himself he forgets to balk, and will move forward.

BALKING IN SINGLE HARNESS.

Treat him the same as you treat the kicker in double harness up to the point where you get the horse ready to harness. Put on a single harness and let him stand in the stall with it on an hour or two, and then take it off, repeating when convenient. On the second day,

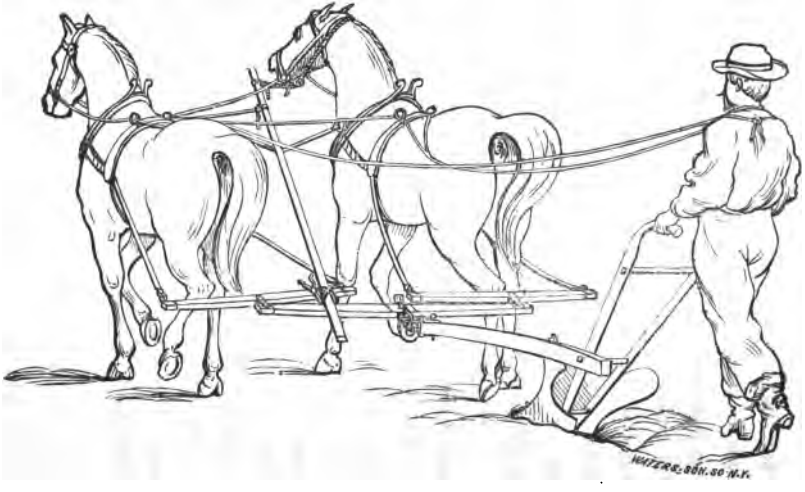


Figure 16.

having the harness on, buckle it up rather tight; tie the traces into the breeching-rings, drawing them up pretty snugly. This will accustom him to the pressure of the harness, toughening him to bear it, as well as if the pressure was caused by pulling a load. He should stand thus for an hour or two, then take off the harness. Between the times of his wearing the harness have him wear the colt's bitting bridle, (*see Figure* 2,) pretty well checked up. Don't be afraid of bitting the balky horse too much, nor of handling him too much with the "Yankee Bridle," provided you do not get the mouth sore. If it gets sore, wait for it to heal. Now put on the harness, buckled up tightly, and the traces tied in, with the "Yankee Bridle" bit and rope attached to the blind bridle, instead of the ordinary bit, the rope lying over the neck; then take the reins and drive him around, twisting and turning in all directions. If he attempts to balk, throw the reins across the back, and exercise him with the "Yankee Bridle," and renew the attempt to drive. Do this as long as there are any symptoms of balking. Keep the horse well fed during all the efforts to break him. Now hitch him up to a light wagon, having the harness very loose and loosely checking him; handle the reins very gently, and drive him slowly and without exciting him, giving him every advantage to go. If he only shows signs of balking, pay no attention to him; but if he does balk, take him out of the wagon, and taking hold of the rope of the "Yankee Bridle," make him feel it severely; then put him

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back in the wagon, and start him along gently. If, in holding him up, he attempts to prance, make him go along at a rapid gait; (under all circumstances, when colts or young horses attempt to prance or wish to rush ahead, we always let them go, and they soon find their level.) If you wish to match or drive him double, mate with a spirited horse.

If your horse is a lazy, sleepy balker, he wants treating very differently. Treat him as before, up to the point where you are ready to harness. Instead of harnessing him, we take him when he is in the stall sleeping, lying or standing, and with a very loud, sharp word or yell, hit him one severe blow with a whip. Do not repeat this until you find him when he is entirely unaware of your presence, when you may do it again—doing it as often as opportunities of this sort offer—and whether in or out of harness, surprise and startle him in this way often. This apparently unnatural mode of proceeding may be easily explained. The horse of this kind is not excitable, and balks because his nervous system does not stimulate him to action. By frightening him in the manner spoken of, you soon arouse his nervous sensibilities, and whenever he is spoken to sharply, and a blow accompanies the word, he is quite certain to move with alacrity. The object in not repeating the word and blow is, that the second one might anger him, which is not what you want, as that would make him worse, it being impossible to cause him to obey you when he is maddened by blows. *Never strike a*

horse while he is balking! and never load a balky horse heavy. If you can not afford to give him light loads, trade him off to some one who can.

RUNNING AWAY.

IN DOUBLE HARNESS.—Use the "Yankee Bridle," (*see Figure* 7,) as in the case of kickers, except that in pulling upon it, after pulling sideways, you pull *backward* each time. Give three or four lessons; if you choose, give them all in one day, though the longer you continue it the better. The next day hitch him up double, using, instead of the ordinary bit, the double-ring bit belonging to the "Yankee Bridle," attaching the "overdraw check" (*see Figure* 9) to the *loose* rings of the bit and the reins to the outer rings, with the "long foot-strap" on. When you start him out of the yard, after he has gone a few steps, pull him up suddenly and say, "Whoa!" pulling on the foot-strap, (*see Figure* 8;) drive him on a little ways, and pull him up in the same way, saying, "Whoa!" as if you yourself were frightened; drive him up to objects which alarm him, or cause noises to be made which excite him, pulling him up, fetching him well back to the wagon. You need not pull up the foot-strap every time. It is used in this case more for a protection than to teach. The teaching is to be mainly done through the mouth. He can not run if the strap is pulled up; so you are safe if you are watchful. You may, however, frequently put him on a run and stop him by the foot-strap, pulling him

back The "Bridle" should be applied for two or three months, at intervals. You may take off the foot-strap after you are satisfied it is safe to do so, though you had better not drive a bad runaway until by means of these sudden stoppings he has become well accustomed to being stopped, and readily yields to the pull and the word. Every few weeks it is well to try the foot-strap and use some means to cause him to try and run, being sure always to pull up before he can run, to test the force of the lesson.

In Single Harness.—We advise that the runaway in single harness should, if convenient, be hitched up double, and apply the remedy for runners in double harness for two or three times, the "Yankee Bridle" (*see Figure* 7) being applied before hitching up at all. Put on the single harness, using "Rockwell's Safety Line," (*see Figure* 10.) Drive with the usual driving-lines held in the left hand, and the safety-line held in the right hand, and if the horse attempts to run, pull up on the "safety-line." This will effectually stop him, and eventually cure him. While you are on your guard you may excite him to run, and then stop him. You will in this, as well as many other lessons, avoid a bad reputation for your horse by practicing after nightfall or within your own premises.

If your horse runs away *but once*, immediately apply the remedy. It is sinful to risk the lives of those who are to ride after him. A little time and labor is of no account in comparison with the damage which he may do,

and a horse which has run once, no matter from what cause, is likely to run again, and the remedy should be applied to prevent it. The plan of tying a strap to each hind-leg above the gambrel, passing it through the girth, was taught by us for years, with tolerable success; but we have abandoned it for the ones we describe, as we have found them to be far preferable. We are informed that a patent has been taken out for this tying plan; but the patent is void from lack of originality, and, in view of the later improvements by us, is comparatively valueless.

REFUSING TO STAND TO CARRIAGE.

Proceed the same as when teaching the colt to stand to be harnessed, using the common bridle if it will answer; if not, applying the "Yankee Bridle," (*see Figure 7.*) Lead him on to the floor, place him in the position you wish him, and say, "Whoa!" The object of this lesson being to teach him the application of the word "whoa"—the most important word in horsemanship—you will proceed by stepping away from him, and if he moves, put him back and repeat, "Whoa!" If he appears to trifle and not heed you, use the "Bridle," pulling upon him to warn him to attend to you. Practice this until he will allow you to walk away in any direction without moving himself. Take a whip and crack it slightly, and if at this he moves, put him back as before, increasing the cracks of the whip until you accustom him to stand while the whip is being flourished

If you are obliged to drive him while you are trying to break him, do not use the word "whoa," as he is not yet accustomed to minding it, and it will only make matters worse. Shift the position of the horse and repeat the lesson, putting on the harness and leading to places where he is accustomed to refuse to stand, and teach him to stand in those places. as well as teaching him to obey the word "whoa," before hitching him to carriage. Then hitch him to a carriage inside a building, with the doors closed. Get in and out of the carriage, rattle the thills and shake the carriage, causing him to stand by means heretofore alluded to. If it appears that the habit is caused by fear of the carriage behind him, take him out of the thills and lead him around it, allowing him to examine it, and even eat oats out of a measure set in the carriage. Now take him out of doors, and if he renews his attempts to start, take him out of the thills and use the "Yankee Bridle," fetching him back between the thills, and say, "Whoa!" You will by this means soon teach him that "whoa" means for him to *stop* and *stand*. Repeated, he will stand quietly until you are ready to give him the signal to start. For the sake of not undoing all you have done, remember the caution heretofore given, to say "whoa" only when you mean him to stop.

PULLING AT HALTER.

Place on him a common halter head-stall. Put on a common girth. Take a half-inch rope about twenty

feet long. Pass the centre of this rope under the tail in place of a crouper; twist the rope over a couple of times; pass the ends of the rope under the girth, bringing an end up on each side of the neck, and pass the ends through the nose-piece of the head-stall, under the cheek-pieces, and tie to a stout ring or place, leaving about three feet play of rope. As soon as the horse pulls back, he being tied by the tail to the ring, he pulls upon the tail, (*see Figure* 17,) and the hurt coming there instead of the head, where he expected it, he starts up it being natural to go *from* the hurt. Another plan may be found under the head of "Colts Pulling at the Halter"—in fact, any plan which brings the pull in the rear, either upon the tail or leg, will do the business. Your own ingenuity will devise several ways to accomplish this; but we consider tying to the tail the safest, as there is no danger attached to it; and if he is in the habit of pulling nights, this arrangement may be left on without fear of the horse getting tangled in the rope, as there would be if tied to the leg. Common-sense will show you that as there is no pull upon the head, and consequently no hurt there, he will soon cease pulling, and lose the habit. To make the lessons effective, you may cause him to pull by using such exciting means as are apt to alarm him.

A rougher and not quite as effectual a way is to place a pulley to the rafter, as high in the peak as you can get it. Take a hay-fork rope, pass one end through the pulley, down through the rack or feed-box, pulling it

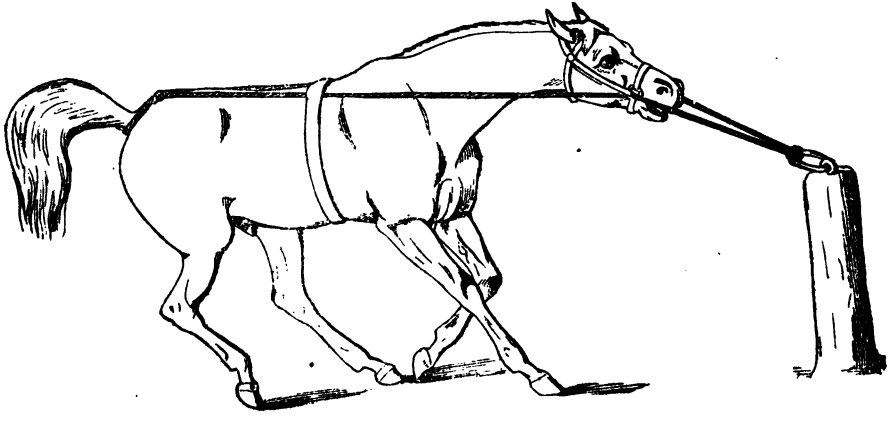

Figure 17.

through the ring or place of tying, about four feet, and tie to the halter. At the other end of the rope, which lies on the floor overhead, tie a fifty-pound weight. When the horse pulls back, the weight lifts, and as he tires of pulling and yields, it draws him back into the stall. These rules followed up will cure.

BRIDLE-PULLING.

Put a rope on the tail in the same manner as in halter pulling, (*see Figure* 16,) except that you pass the ends through the rings of a bridle, and tie them to a post where the horse is in the habit of pulling, unhitching the wagon if one was attached. Step away, and frighten him by means of a wheelbarrow or whatever is apt to alarm him, causing him to pull. As he pulls, the pressure coming upon the tail, he will step up to the post. Take hold of the rope between the post and his head, and give it a few pulls back and forth. By this means he will learn to step forward rather than to pull back. After a few lessons he may be tied with a common tie-strap, the end, however, passing through the ring of the bridle-bit, and being tied to the back-strap. Do this until you are satisfied you have effected a cure.

BAD TO BRIDLE.

With the "Yankee Bridle," (*see Figure* 7,) pull his head down and gently handle his ears. When he will allow you to do so without trying to get his head up, loosen up and allow him to lift it. If he is inclined to

strike, put on the halter and tie him to a post; then apply the "Yankee Bridle" sharply, keeping at a distance; then approach him, keeping the halter pulled tight by means of the rope in your hand, and pulling his head down, handle his ears gently. When he allows it quietly, caress him. If he is inclined to back up, back him into a stall and repeat. In half an hour he will allow you to handle his ears to your liking. Repeat the operation whenever he shows signs of returning to the habit. The head-stall on such a horse should be of good length, and the ears always handled carefully. If you have not time to break him, in putting on the bridle pass your right hand under the neck, take hold of the nose from the opposite side; with your left hand pass the bits in the mouth; take your hand from the nose and with it carefully put on the head-stall, while your left hand is in the mouth working at the bit, shaking and fumbling it to keep his attention until the head-stall is properly placed.

If bad to put the bits in the mouth, pass your right hand around under the neck and take hold of the nose; with the left hand press the lips against the bridle-teeth before the bits touch the teeth. This will cause him to open his mouth. To break up the habit, use the "Yankee Bridle" while bitting, passing the bits in and out, hitting the teeth each time. This will cure him.

BAD TO BACK.

Use the "Yankee Bridle," (*see Figure* 7,) and then tie him to a ring in a wall or building with a long

halter-stale. Lead him past the ring as far as the length of the halter will allow, and from the opposite side from the halter pull back upon the "Yankee Bridle," (*see Figure* 18,) not using at this time any words. Continue this until he backs readily at the pull, then begin using the word "*back*," and repeat until he understands the meaning of the word, and will back upon being told to. Do this next in harness, and, if necessary, after he is hitched to wagon. There is no difficulty in soon fixing the lesson upon his attention so that he will never forget it.

A plan which we once used was to use a rope in somewhat the same manner as the "Yankee Bridle," except that instead of the double-ring bit we had a small loop on the end of the rope, which slipped on the under jaw. This cord was used by us for a while as we now use the "Yankee Bridle;" but we found it to injure the mouth, and in fact we killed one horse in Salem, Mass., by its use, and have since discarded it, finding by experience that the bridle of our invention is perfectly harmless and more effectual. With the cord alluded to we would pull backward upon the horse, at the same time lifting up his foot with the "foot-strap."

The two worst horses we have ever met with in our travels were broken to back by these means. The first one was at Brighton, near Boston, Mass., in the spring of 1863. This horse was a large, stout animal, which for nine years had not been known to back, and all efforts to teach him had failed. If put into a stall too

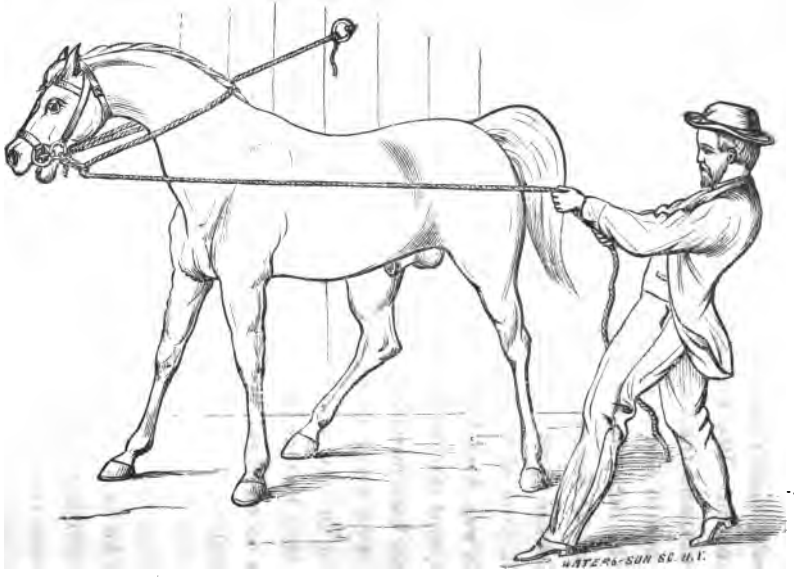

Figure 18.

narrow for him to turn round in, they were compelled to hitch another horse to him and draw him out. We broke this horse in twenty-five minutes, so that he would readily back at the word, and he never has forgotten it. We broke *him* by means of the cord in the mouth, and the "foot-strap," but not without blistering his mouth badly, and marking it for life.

The other horse alluded to was broken at Cleveland, Ohio, in February, 1866. In this case we used the "Yankee Bridle," and a halter attached to a ring in a wall, (one of the best places for the lesson to be given.) This was done before one of our private classes in that city, and the animal was so notoriously bad that not one of the two hundred spectators present had faith that he could be made to back; but he *did* back, and without being in any way injured, within fifteen minutes from the time he was brought before the class, and the lesson was so effectual as to operate permanently upon the animal.

BAD BITERS.

If he is a stallion with a confirmed habit of biting and striking, we should not think it worth our while to attempt to cure him, but should castrate him at once. You are always in risk of your life or limb while you have such an animal about. If a mare or gelding, put on the "Yankee Bridle," (*see Index*,) and watch him closely, in a sly way, not letting him know you are watching him; and when he attempts to bite, give him

a few severe pulls upon the "Bridle." Do this in such places as he is most likely to bite, and we will warrant that a few efforts will teach your animal that his jaws were not made to bite his keeper. To prevent a stallion from biting his mate when hitched up double, attach an independent line to the outside ring of his bit, letting it hang loosely, the end being held by the driver. As he attempts to bite, pull up sharply, and hit him severely with the whip.

PUTTING TONGUE OUT OF MOUTH.

To prevent this, take a thick piece of patent harness leather, about four inches long and two inches wide. Cut off the ends rounding; near the edge on each side punch two holes, through which put a leather string, and tie it on top of a joint-bit. When you put in the bit place this on top of the tongue; take the side-pieces of the head-stall up pretty well. This will prevent him from running his tongue out over the bit. If he runs it out under the bit, use a straight bit, bore two holes through the bit from the under side, about an inch and three-fourths apart. To these attach a piece of large wire, bringing it under in the shape of the bowl of a spoon. When you put on the bit, pull the tongue through between this wire and the bit, seeing that the space is large enough for it to sit easy. These plans will soon break up this bad-looking habit.

HARD PULLERS.

Try giving a horse which pulls upon the bit all the road he wants and let him go; if he goes too fast, jerk up on one line, and then the other, (having a heavy load behind him;) slacken up and let him go again. If this does not answer, drive him with the "Yankee Bridle," (*see Index*,) without the rope, attaching the lines to its bit, without martingales. We have known several instances where stage-horses, livery-horses, plow-horses, etc., have been temporarily stopped from pulling by tying a piece of waxed-end or stout small twine around the nose, just above the bit.

WHEELING AROUND IN HARNESS.

Put a horse with this habit in the "Safety Shafts," heretofore described, (*see Figure* 19;) wind the front iron with a hay or straw rope; tie a strap into one staple, lift up the shafts, and throwing the strap over the neck, tie it to the other staple, bringing the shafts up high enough to have the front iron come where a breast collar should; fasten your *stout* breeching-straps well forward on the side poles. Now put on "Yankee Bridle," (*see Index*,) and give him a few pulls; then have some object which causes alarm, such as an umbrella, hat, etc., brought up in front of him. Hold well on to the "Bridle," and let him examine the article. The shafts will keep him from backing or wheeling, and the "Bridle" must keep him from going ahead. Then drive him up to these objects by the reins, teaching

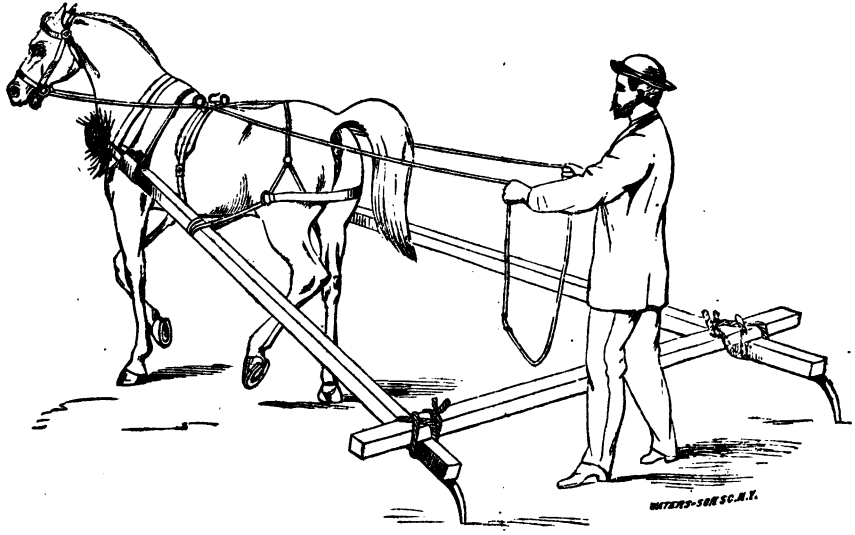

Figure 19

him not to fear them, and that going ahead is the only direction for him. These shafts will be found useful in many other particulars which will readily suggest themselves.

There are, of course, many other habits of the horse; but a sensible application of the rules we have laid down will find a remedy for most if not all of them.

GENERAL REMARKS.

HOW TO THROW A HORSE.

The easiest and most effectual method of throwing down a horse, is to strap up the near-side fore-foot; put on a surcingle, with a ring fastened to the top of the surcingle; tie a half-inch rope around his neck in the same manner you would to hitch him by the neck; place it up near the throat-latch, with the knot on the near-side of the face; pass the rope through the mouth, and bring it along his neck on the off-side, and pass it through the ring on the back; standing back on the near-side, about six or eight feet from the horse, opposite his near-side hind-leg, drawing the rope sufficiently tight to keep it in the mouth. Pull carefully until he yields his head a little to the off-side; then give a sharp, strong pull, and keeping your hold, pull strongly until

he is down, (*see Figure* 20,) which will occupy from one to five seconds. As he goes down, lying upon the near-side, you keep the rope tightened, and he can not get up. By repeating this, you will soon make him quite a trick-horse, as he will learn to lie down by simply pulling upon the off bridle-rein. Throwing is often necessary in surgical operations, and as the horse may be thrown on either side, and with perfect safety, by this plan, we consider it preferable to the former way of throwing him by main strength.

Another very good plan, and in some respects more convenient, especially where it is desirable to tie the animal when down, is to take about a four-inch ring. Sew into it two straps, one about three feet in length and two and a half inches wide, with a double-tongued buckle sewed on the other end; and the other strap about one foot long and the same width, with holes punched to fit the buckle; take a rope about eighteen feet in length, and loop the centre on the ring. Strap up the near-leg of the horse you are to operate upon, and place on him a strong bridle, with the check-pieces tolerably short. Buckle the wide strap around the neck, with the ring upon the breast; pass the rope between his fore-legs, and thence between his hind-legs, fetching the ends of the rope again forward by bringing them on the outside of each leg above the gambrel; and passing them on the outside of the fore-legs, put them through the ring from the inside. Have a man hold of each rope, prepared to pull as you say, "Ready!"

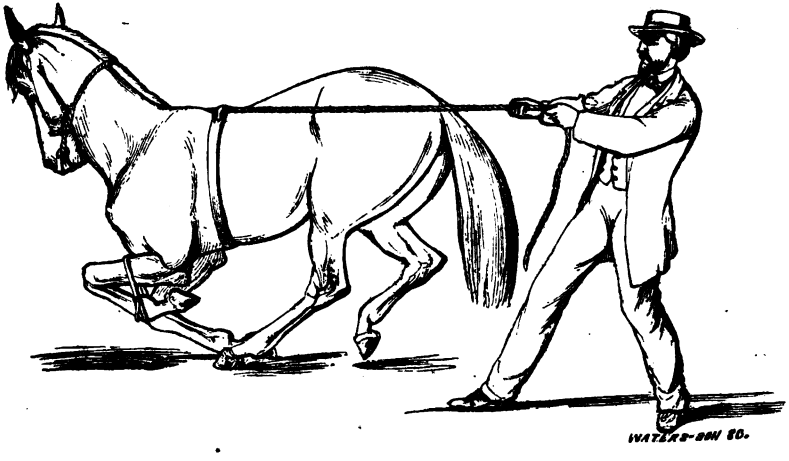

Figure 20.

which will be as soon as you slip the cord below the gambrel on both legs, which you may then proceed to do, (*see Figure* 21,) you pulling upon the off-side line attached to the bridle. As he falls, which he will do upon the near-side, the person holding the near-side rope will keep it tight. As you stand by the shoulder, you reach over and take the off-side rope in your hands, the person releasing it to you to kneel down, and, taking the horse's head between his knees, hold it with the nose upward. With the off-rope take a half-hitch over his off hind-foot, and bring down his off fore-foot; take a half-hitch on that, and another half-hitch on the hind-foot, and wind the rope once around the rope between the two feet. This done, receive the near-side rope and take two half-hitches over the near hind-foot. Take a strap, already prepared, about three inches wide, and about three feet in length, with a D fastened to each end, and with an inch strap about a foot from each end, about three feet in length, so prepared with a buckle as to be made shorter or longer, as the case may require, to be used as a crouper; tie the strap through the D to the off-foot with the end of the rope. Go behind the horse, and taking hold of the tail between the small strap and wide one, pull the wide strap as far under the horse as possible, and rolling him half over, pull the strap up to just beyond the point of the hips; pass the rope on the near-side through the D of the strap, and, drawing the near-legs down close to the side, tie it. Keep him on his back during the operation. Be care

Figure 21.

ful and observe the instructions closely, as a failure to do *every* portion of the work properly may cause you to be injured.

There are many other plans for tying horses for surgical operations, and the operator must exercise his judgment, governing himself by the location of the operation. The examples we have given are, in our opinion, the simplest, safest, and surest plans which have yet been adopted.

TO FETTER A HORSE.

Buckle a wide strap around the neck of the horse, to which attach a strap at the breast, bringing it between the fore-legs and through over the surcingle, with a pulley or D at the end of the strap just beyond where it passes through over the surcingle. Take a D, and to the straight side attach two straps with buckles, of sufficient length to go around the hind-leg, one above and one below the gambrel, with the D in front. Have one for each leg. Tie a strap into one D, pass it through the pulley, or D, at the surcingle, and tie it to the other D, having it drawn moderately tight, when the horse is in a quiet standing position. (*See Figure* 22.) This mode of fettering has been found very serviceable in pricking horses. We do not consider it a practical plan to prevent kicking in harness, as it does not teach the horse any thing, and only stops him from kicking for the time being. If the strap ran to the mouth instead of the breast, it might be tolerably effectual to prevent

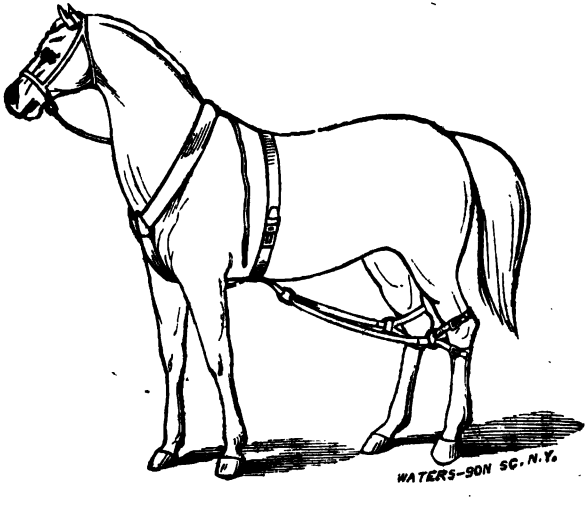

Figure 22.

kicking, or running away, as it would operate upon the portion where control is necessary to be had, and where, in the absence of the strap, he might be reminded of it by the lines.

We have used with success a side fetter, which consists of a strap about three feet in length, with a D in each end, and a short strap in each D, to buckle around the hind-leg and fore-leg, just below the fetlock.

HITCHING A HORSE.

To hitch a horse with the driving-rein, take hold of the rein about four feet from the end, (it being unbuckled at the centre of the hand-pieces,) double it up, tuck it through the ring of the bridle-bit, and place the loop over the bar of the bit. This makes a substantial tie-strap. If there is no bar to the bit, take a half-hitch over the loop tucked through the ring. It will answer the same purpose.

A very common way of hitching throughout the Eastern States is to carry in the wagon a weight of about thirty-five pounds, with a strap attached; the weight being laid upon the ground and the strap fastened to the bridle-bit, makes an effective way of hitching.

A very good plan to teach a horse to stand without hitching is to back the wagon up to the post and tie it by the axle. The horse soon learns to satisfy his uneasiness by stepping to the right and left, without attempting to step away.

GENERAL HINTS.

Match horses with reference to size and motion particularly—to color if you can, and have the other requisites.

Always have inside lines on double team quite long, and back-strap short.

Never *check* a horse if you wish to have him last long, except while training.

Feed in *low* mangers—*water* and *oats* to be given *first*, hay afterward.

If worked, very little water to be given in the night.

Stop at the *top* of a hill, and let your horse get breath.

The shoe should fit the foot—not the foot fit the shoe. Never cut the bars or frogs.

Wet the *hay* and *not* the oats for a coughing horse.

Never let a horse stand long facing a cold wind.

Feed light when changing feed.

When training in a building, have carriages, etc., removed.

Always approach a strange horse near the shoulder.

Use but a few words with a horse, but have them understood.

Be earnest and prompt, but not harsh.

Teach before whipping, and when whipping do it to frighten, not to enrage.

Never jump from a wagon when your horse is running away. More lives and limbs are lost in that way than by remaining in the wagon.

Exercise sound judgment by purchasing a horse suited to the business required of him. Some horses are good saddle-horses, but might not make good cart-horses.

If a horse cribs, drive a few three-ounce tacks through the throat-latch of his halter, so that the points are inward toward the neck when the throat-latch is buckled moderately tight. As he attempts cribbing, the swell of the neck causes him to be pricked, which admonishes him to quit.

TRAINING CATTLE.

Breaking Steers.—First, get your steer into a room or small yard, so that he can not run from you; then approach him slowly; and if he runs, do not be in a hurry, but wait until he gets to the end of the room or yard; then approach again slowly, as before. A steer may run from you in this way several times; but do not try and stop him with your whip, or force him to think that he will be at all injured, until he will stand and suffer you to approach him. As soon as this is accomplished, gently tie a rope around his body near the shoulders, rather loosely. Then take another strap or rope, and gently fasten one end to the near fore-foot, then pass the other end over the rope or surcingle, beneath the body. This rope should be sufficiently long to allow him to run to the end of the yard without your moving; at the same time you holding the rope sufficiently firm to compel him to move on three legs. Then approach him again quietly, and so continue until he will allow you to approach and handle him as you please. Now take a short hold of the strap with your left hand, your whip in the right, which pass over his shoulders and quietly touch him on the off-side of the head, at the same time saying, "Haw!" and continue this until he moves his head a little toward you; then

stop and caress him about the neck and head. Repeat this until he will haw around toward you at the word of command. If he attempts to run from you, pull upon the strap, saying, "Whoa!" and at the same time hitting lightly upon the head with the whip. As soon as he learns to stop at the word of command in this way, and comes toward you readily, take off the strap and the rope around the body, and turn him out. Then take the mate and give him the same course of training, until you can accomplish a like result with him. Then turn him out. By this time the first steer will be cool and rested, ready to receive another lesson. Now drive him into the inclosure, and repeat his lesson with the whip. Then quietly touching him gently on the near side of the head, at the same time saying, "Gee!" until he will step around from you; then caress and repeat until he will gee or haw readily. Repeat the same lesson with his mate, which is all that you should try to do with them in half a day. Then take both together in the same room or yard, and repeat these lessons until they have a thorough understanding of what you mean. Then take one of them near the wall, standing by his side, hitting him with your whip gently over the head, at the same time saying, "Back!" until he will step back, for which caress. Repeat this until he will go back readily at the word. Give the other steer the same lesson. This course of training will make your steers quite obedient, and willing to haw, gee, or back, which will be all that you should require of them for one day's lesson. When convenient, repeat the lesson with both together. Then place the yoke upon them and let them go for an hour or two, or sufficiently long to become reconciled to the restraint of the yoke. Then repeat your lesson in the open yard until they fully

understand what you require of them while yoked together.

If your steers have learned to run away from you, which is a common result of the ordinary method of training, put on the rope and strap to the foot. If hitched to a wagon or sled, let your man hold the foot-strap, which run back between the steers, and the moment they attempt to run away, he pulls up their feet, while you whip them over the head, which will stop them immediately, and in a short time break up the habit.

Kicking Cows.—It is natural for the cow to stand while being milked; consequently the heifer knows nothing about kicking until hurt or frightened into it. The lesson in regard to heifers is therefore perfectly plain. Be careful and not hurt or frighten them. If by accident you should, and they kick, do not punish them for it. Kindness and gentle handling is the only remedy. If your cow kicks, let your reasoning for the cause be based upon the principle that she never kicked until she was injured, and the remedy will at once suggest itself. No cow was ever broken of kicking by striking with the stool or other weapon. This practice only puts the cow on her guard, and as you come near her with the stool she uses nature's defense, and kicks. Handle her gently. If she walks off or kicks, pay no attention to it, using no loud words or blows. If her teats are sore, she is quite liable to do either; and you must have patience until they are healed. In our experience, we have never found a confirmed kicker in a yard where kindness was a characteristic of the family who handled the dairy; on the contrary, we have found plenty of them where quarreling, loud words, and general bad temper prevailed

TRAINING DOGS.

The dog is the most domestic and intelligent of all animals. He is easy to teach, and, if properly used, is a faithful and willing servant of man; if abused and ill-treated, he is quite apt to be disagreeable and a nuisance. The dog being so closely a companion of mankind, it becomes a duty to educate him in such a manner that he will reflect credit upon his master, and be an agreeable inmate of the household as well as a useful assistant. We have given much attention to this subject, it being one which can not fail to interest those who give it thoughtful application. We have had two of the best trained dogs, probably, ever known in this country, and at the present writing have a greyhound which understands to obey thirty-two different words, and we always found a pleasure in teaching them. The rules whereby any one who will be patient, kind, and persevering, can educate dogs to be useful as well as to perform pleasing tricks, are easily understood We give a few, sufficient to lead the operator to the practice of many more. There are of course as many different traits and dispositions of dogs, as there are different breeds, and judgment will be required in teaching the dog, to train him to that to which he is best adapted by nature. For instance, a Terrier will catch rats, while a Setter will scent birds, without training; the St. Bernard is a faith-

ful watchman, and the Greyhound takes to running, from his birth. These *natural* traits it is necessary to have in mind in attempting to teach the dog, being careful in not urging upon him the performance of any duties or tricks which are manifestly not in his nature to do. In selecting dogs for any particular lesson, study this subject closely. As probably the most useful lesson to be taught, we commence with

TRAINING THE SHEPHERD TO DRIVE.

Take a well-bred Shepherd-dog, about six months old, reared in some secluded place, hearing no words with a meaning intended to be attached, except his name. He should know nothing of the ordinary words in use toward dogs, and not have been handled by boys or careless persons. Take him alone with you in a large room. The first thing to be done is to teach him to lead; placing a strap around his neck that can not hurt him, to which attach a cord six or eight feet in length; stand still and hold upon the cord, for a few minutes, until he ceases struggling to get away. It is best to give one lesson each day during the whole training. The first two lessons should be devoted to teaching him that he can not get away. Now commence teaching him to come to you by pulling upon the rope and saying "*Here!*" using only the *one word.*

In the use of this as well as all other words used in teaching the dog, *one word* is all that is best to try and teach him for any *one act*, it being so difficult to make him understand if you attempt to teach him more. When he is once fixed in the habit of minding the word, you may then use such other words in connection therewith as are pleasant to the ear, as, for instance,

"Come *here*, sir!" Without the word *here* he will not know what you mean, and the others, being meaningless to him, do not puzzle him. He will also be less liable to have too many masters, as the *one* word will not be likely to be used every time by a person unacquainted with your mode of training. Of course, if you prefer it, you may, in giving the lesson, substitute other words for those laid down; but we give those which are the readiest to the tongue.

As the dog comes up, whether voluntarily or not, say, "*Do!*" and caress him. A lesson of an hour or two, working slowly and patiently, will be about right each time. Proceed with it until he will come to you from any portion of the room at the word "here." He will have learned by this time, probably, that the word "*do*" is for him to understand that you are through with him. When he perfectly realizes this, you may then prefix words, and say, "That will *do*," emphasizing upon the word *do* each time. You may also now say, "Come *here!*" remembering that the words *here* and *do* are the only ones he obeys. He can not connect words to form sentences, or be made to understand them when thus connected.

You now wish to teach him the words "*Go*" and "*Halt.*" To do this, you will place yourself in a position of the room opposite to where the dog would naturally desire to go, (for instance, the door, or something which would attract him, such as food.) Say, "Go!" and by coaxing and urging him, start him along; as he gets part of the way, say, "Halt!" pull upon the string, stopping him, and say, "Halt!" again. Proceed with this until he has learned to obey both the words "go" and "halt." To teach these four words named will generally take three or four weeks. Now teach

him to bark at the word "speak," by holding up some thing which he wants very much, for instance, food, when he is quite hungry. You may now let him loose and let him run about with you, (*previously* keeping him confined, but not in a narrow place,) being watchful that he does not stray off, nor be hurt or handled by others. He will soon become handy about the house. You having control of him through the words you have taught him, you can keep him in his place by word of command. For instance, if you wish him to go out of doors, show him the door and say, "*Go* out!" The word "go" will start him, and in a little while he will become familiar with the word "out." Let him have a fixed place to sleep, and teach him its name. If you have a dog already trained to drive and *go behind*, take him out with him to drive in the cattle. He will thus learn that they will run from him. Say nothing to him while he is with the other dog, unless he attempts to go to the *head* of any of the cattle. This you must not llow. After two or three times take him out without the other dog, and allow him to run after the cattle, provided the cattle are used to being driven by dogs. It will not do to let him run where there is a chance of his being turned upon. If he runs them too fast, say, "*Steady!*" He will not know what you mean, but as you use words with him only when they mean *something*, he will be apt to pay attention and go slower. If he does not, say "Halt!" then "Go!" steadying him by the word "Steady!" if possible. He will gradually learn its meaning by its repetition. If you have no other dog, you will let him go without, being more watchful of him that he does not go to the head of the cattle. Otherwise say nothing to him except "Go!" not letting him start until he gets the word. After a

while you may proceed to practice upon the other words he knows. If he shows no disposition to bite at the heels, or pull at the tail, take a rope and tie a knot a short distance up, fringe out the end, and play with him with the rope, letting him catch hold of it, and cause him to bark at it by using the word "Speak." When he takes hold of the rope say, "*Up!*" and when you wish him to let go, "*Do!*" You may then, with a slow cow, call him up, and, taking hold of the tail, say "*Up*," and "*Speak*," to teach him to take hold of the tail and bark, when you say, "Start 'em *up!*" and "*Speak* to them!" and to let go when you say, "That will *do!*" Now accustom him to the word "*Fetch*" for sheep, and "*Get*" for cattle, etc.; so that when you say, "*Go* and *get* the cattle!" he knows you mean cattle, instead of sheep or horses. You may now teach him to know the right from the left, and to obey your orders in that respect, by taking him into a large room, and by the motion of your right hand try to have him go to the right from you, saying, "Go"—"Right!" If he does not do it, say, "Halt!" and repeat. When he does do it, say, "That will *do!*" Continue this until he will go to the right at the motion of your hand and the word "Right;" then with your left hand making motions, and the word "Left," you teach him the opposite. By these motions and an appeal to the intelligence of the dog by your countenance and eyes, you can start him for the fields in any direction you choose, and he soon learns to do your wants with very little telling. Following these rules will satisfy you that the dog can be taught indefinitely respecting all things which pertain to his peculiar nature.

THE WATCH-DOG.

For a good watch-dog select one of a breed adapted

to the business. There is but little that you can teach such an one, as it is somewhat of a natural trait; and any other than a *natural* watch-dog, however much you may labor with him, will never be reliable. A barking dog, one that will be noisy on the approach of intruders, is the best; a dog that bites but does not bark is only fit to put in barns or other out-buildings nights, chaining him up day-times; and then he is dangerous, even to his keeper, as a sudden start will cause him to bite any one. To teach your dog, give him something to watch, saying, "Take care of it!" as you place him near the object. He will soon learn the word, and upon being directed to any particular thing, will faithfully guard it. While teaching him allow no one but yourself to approach him without setting him on. You may have a stranger approach him and tease him, you urging him to drive the person away, and as soon as he starts, let the person run, you calling the dog back. While young do not compel him to stay too long at one thing, and when you go up to him say, "That will *do!*" feeding him something. After the manner spoken of in the previous illustration, whenever you wish the dog to bite or *go at* any person or thing, you will teach him words the *reverse* of what you mean, such as, "Be still," "Get out," "Lie down." You will see that a person not understanding the dog will not be very apt to get near him, as he would naturally make use of those words, and they would be setting him on, instead of quieting him. To call him yourself, use such convenient word as you choose, but not one naturally used by others. As this ingenious use of words is about the only new idea we can suggest to teach Watch Dogs, the master can exercise his own ingenuity to render it practical.

THE TRICK DOG.

Many amusing tricks may be taught which will exhibit in a wonderful degree the intelligence of the dog. As we have before said, much depends upon the breed. A dog of one peculiar breed may be taught a certain class of tricks, while that of another breed will be entirely different in his characteristics. A well-bred dog is hard to teach any tricks except those pertaining to his nature, while a mongrel cur is quite easy to teach any. Perhaps a Spaniel-poodle dog is the most tractable of any, though a black-and-tan is quite apt. We give a few examples, sufficient to form a groundwork for the intelligent operator to extend the list of tricks at his pleasure. We begin with a lesson

TO TEACH HIM TO SIT UP.

Set him up in the corner, and with a switch hit him lightly under the mouth, snapping your finger and saying, "*Sit up!*" As he comes down put him back and repeat until he will remain, which he will do in a few minutes; then say, "That will *do!*" and coax him down and caress him. When he has learned this sufficiently, set him up against a wall and try the same thing; this will require more patience, as he can so easily get over to either side. When, however, he will do it, then take him out in the centre of the floor; this will take still longer; but if followed up kindly and perseveringly, he will learn to perform the trick at the word and the snapping of the finger.

TO TEACH HIM TO SIT DOWN.

Press your hand upon his back toward his hind-legs and say, "*Sit down!*" at the same time tapping with

your foot upon the floor. If he attempts to lie down draw his feet under him, scare him up, and teach him that "sit down" is what you are after, tapping him under the chin to keep his head well up. He will, after a few lessons, sit down at the word and a tapping of your foot on the floor.

TO STAND UP.

Take some food in your hands and offer it to him, holding it well up, and say, "*Stand up!*" Repeat this until he will stand up quite readily, holding out your unoccupied hand for him to support his fore-feet on. Gradually take away your hand, each time that he comes up, saying, "Stand up!" Then take him by the forward feet and lift him up quite hard, and say, "Stand up!" You will soon get him so that when you lift him he will straighten up and show signs of standing; then make the effort to teach him to stand up at the word and the holding out of your hand. You may now combine this with the last two tricks, saying, "Sit up!" "Stand up!" "Sit down!" "That will do!" These are the first tricks he should be taught, as they are the foundation for others.

TO GET INTO A CHAIR.

This is very easily done, taking your own way to coax him into the chair, using the word "*Chair*" whenever you cause him to get into it. When he becomes familiar with the word, accompanied with a motion of the hand toward a chair, you may use other words in connection therewith, as, "Go and get up into the *chair!*" After he will do this handy, you may then teach him to put his paws upon the back of the chair, by asking him to "Put them *up!*" or saying, "*Up!*" assisting him at first

When he will do it readily, you may teach him to put his head down upon his paws, by placing it there, and repeating the word "Down," of course caressing him each time that he complies. To have him hold his head up, tap him under the mouth and say, "*Up!*" remembering to say, "That will *do!*" when you are through with the trick. You may now teach him to jump over the chair by playfully coaxing him to do so, saying, "Jump!"

TO MAKE HIM GO LAME.

Tap him with a little rod upon the hind-foot, saying, "*Lame!*" teaching him to stand and hold it up whenever you say "lame." Now coax him along, and if he puts it down, hit him quite smartly on the foot, making him keep it up until he will go lame at the word and a motion of the rod. Now, whenever you send him into the chair, as before, as he goes to jump down, stop him, teaching him to wait for the word "*Do.*" As he comes down with his fore-feet on the floor say, "*Steady!*" and teach him to stop with his hind-legs up in the chair. He is now ready

TO RUN ON HIS FORWARD LEGS.

To teach him this, take hold of his hind-legs, lift them up and walk him around in a circle, and place them in a chair, saying, "*Round!*" Do this every time you perform the trick of having him get into the chair. After a while take him by the tail and lift him up, and, switching his hind-legs lightly, walk him around in the same manner, saying, "*Round!*" as before. With patience and perseverance he will learn to lift up his hind-legs at the motion of the whip, and at the words, "*Go around!*" perform a circle, walking on his forward

feet, and place his hind-feet in the chair; of course the height of the chair must be adapted to the length of the dog's legs.

TO SIT ON A STOOL.

It is now very easy to teach him to "*sit down*" on a low stool. You may then teach him to "Take a seat" on the stool by leading him around by his forward feet, and setting him on the stool with his forward feet held up, saying, "Seat!" You then have him taught to go on all-fours and *sit down* on the stool, and to go on his hind-feet and *take a seat*, with his forward feet up.

TO TEACH HIM TO FIND THINGS.

Take something with which he is accustomed to play, and after getting him enlivened with play, call him up to you and blindfold him, and throw the article a short distance from you. If the dog has good scent, tell him you have "*lost;*" then remove the blindfold and he will search and find it. Repeat this, throwing it farther each time, until you can throw your knife or any thing which you have held in your hand, at a distance, you looking in the direction, and saying, "I have *lost* my knife." He will search until he finds and brings it to you. If the dog has not good scent, teach him to look *down* at the word "*find*," and up at the word "*up*," doing as before.

We have now given a sufficient number of examples to set forth the important rules which govern the teaching of dogs. By an observance of these you may teach your dog to climb ladders, fetch things to you, carry baskets, roll over, lie down, shut doors, and an almost innumerable number of tricks. To teach the dog, however, you must have perfect control over your temper, never whip severely, and never get out of patience.

SHOEING.

The object in shoeing horses is to prevent the hoofs from being broken or otherwise injured, as would naturally result from driving over our hard roads unprotected in this manner. It has often been remarked, and truly so, that "No foot, no horse," which literally means, a horse without sound feet is of but little value. The feet are the basis upon which the whole superstructure rests, a beautiful and complicated piece of mechanism, and, like all complicated machinery, easily deranged; hence the necessity of preserving it in a healthy state, to accomplish which, shoeing has been instituted, which, when properly done, has the desired effect. The shoe has two very important offices to perform: 1st, to preserve the hoof in its natural shape; 2d, to protect it from injury. In order to properly understand the principles of shoeing, it is necessary that we should understand the structure of the horse's foot, and with this view we will briefly consider its anatomical relations. The hoof, or horny case, is the first object claiming our attention, which, for convenience of description, has been divided thus: the crust or wall, the sole, and the bars. The crust or wall is that part which covers the anterior or front part of the foot, attached above to the skin at the termination of the hairs. This upper margin is termed the coronet. The crust or wall, internally,

is made up of numerous horny *laminæ*, which are very soft and elastic in their character. The sole is the ground surface of the hoof, anterior to the bars and frog. The bars are reflected processes of the wall passing obliquely across the bottom of the foot on either side of the frog, giving support to the heels. The internal surfaces are covered in part by horny *laminæ* or plates, but are less numerous in proportion to the surface covered than are those of the crust or wall. The wall is divided into the toe, the quarter, and the heel. The toe is the front part of the hoof, the quarters are the central parts of the wall on either side, and the heels are the posterior portions of the crust or wall, being the thinner and weaker parts. This horny case in its natural condition is quite elastic, thus preserving the whole animal frame from concussion. The frog is a triangular, elastic cushion situated between the bars, and filling up the entire triangular space between the quarters and heels, completing the ground surface of the foot. The internal surface of the frog is very irregular, presenting three elevations and two depressions. The central ridge or division extends from before backward and upward. The two depressions between these ridges receive the soft cushion or ligamentous frog. The foot internally comprises the coffin, navicular, and lower part of the *coronary* or small *postern* bones, also *ligaments*, *cartilages*, the *sensitive laminæ*, *sole*, and *frog*. The *coronet* or small *postern* bone is nearly square, presenting four surfaces, the upper, for articulating with the large *postern*, having an elevation in its centre, forming with the large postern a kind of hinge-joint. By this arrangement strength is added to the parts. The lower surface is concave in the centre, which uniting with the *coffin* and *navicular* bones, forms another hinge-joint of

still greater strength. The coffin-bone is semi-lunar in form—the front surface is convex, the ground and posterior surfaces are concave. The projections behind on either side are called the alæ or wings, to which are attached the lateral cartilages, which extend upward and backward, and are readily discovered by placing the fingers above the hoof at the quarters. The navicular bone completes the bones of the foot, situated posteriorily between the coffin and coronary bones, forming what is commonly known as the coffin or navicular joint. It is semi-oval in form, presenting four surfaces, the upper articulating with the coronary, the anterior with the coffin-bone; the lower, over which the *perforans* tendon or back sinew plays, has a much broader surface than either of the others. Posterior and under these bones, we have the *ligamentous frog;* between this frog and the sole we have the sensitive frog; covering the anterior surface of the coffin-bone we find a very delicate structure, known as the sensitive laminæ, which is very vascular and largely supplied with minute nerves. This laminated structure corresponds to that of the hoof, and when adjusted, fills up the entire circle of the hoof. I deem it unnecessary to go into a more minute description of the parts, as it would be uninteresting to the general reader. To those who feel interested in the subject of shoeing, great benefit will be derived by a careful perusal of these remarks.

It has been proven by long experience, that the sensitive parts within the hoof do not suffer so long as the bearing of the animal is confined to the crust or wall, but when removed from that bearing they soon become diseased; hence if the sole of the foot bear against the shoe in any considerable degree, the fleshy or inner sole be-

comes bruised between the shoe and the horny sole below and the coffin-bone above—the horse soon becomes lame in consequence. It is obvious, therefore, that the crust or wall being the natural bearing of the horse's foot, it should be carefully protected, and confine the bearing of the shoe to that part of the foot. A shoe of the breadth of the crust would defend the foot sufficiently as long as it would last; but in consequence of its rapid wear, such a shoe would only be applicable for racing, or temporary purposes. To give all the support the crust can receive, and at the same time to make the shoe sufficiently strong to wear a reasonable time, the upper surface of the shoe should be divided into two parts. The first or outer margin should be perfectly level, and of the width of the crust; the second, the inner margin, beveled inward so as to avoid pressure upon the sole, leaving the heels of the shoe perfectly level from the last nail-hole backward. It must be borne in mind that no one form of shoe is applicable to all forms and conditions of the feet. The above shoe is intended only for the healthy foot—as it deviates from that standard, so must the form and bearing of the shoe be altered to meet the altered conditions as they occur in the horse's foot. To more clearly illustrate this subject is only to refer to the injuries of shoeing as ordinarily practiced. Examine, if you please, the ordinary shoe used on all occasions, and upon all forms and conditions of the feet; place a level across the heels, and you find the shoe at the quarters presents a concave surface, being beveled from without inward; hence the foots rests in a concavity. When such a shoe is nailed to the foot, it presents a lateral resistance to the natural expansion of the foot, it being impossible for the heels to expand up these inclined planes; hence the tendency to force

\ ran inward, so that they gradually become contracted. This is a natural result, and follows, sooner or later every case where shoes have been thus contraction. On the other hand, shoes properly made and fitted have never been known to cause contraction. If we observe the foot in the early stages of contraction, we find this horny case gradually becoming less; it no longer accommodates itself to the soft structure within its limits; the result is, concussion is greater, and the elasticity very much less; in consequence of which the parts become bruised, fever ensues, which still further facilitates contraction of the hoof by absorbing its moisture, and we soon discover lameness in consequence of corns making their appearance. The first effect of contraction is to bruise the sensitive portion of the hoof. Particularly is this the case at that part of the foot formed by the crust and bars, causing a contused bruise which is called a corn. This occurs on the inside quarter. The crust and bar forming a triangular space causes a two-fold pressure upon the sensitive parts within, acting like a vice; and as the space becomes diminished the contusion becomes greater, the hoof becomes more hard and brittle, with a strong tendency to crack on very slight concussion. On removing a portion of the horn at the part of the foot indicated, we find a red spot, sometimes slightly, at other times of a brownish or bluish-red appearance. The feet in the latter stage are in such a condition as to require prompt attention, or we may have a sinus forming through the quarter, producing a disease known as quitter, often terminating in permanent lameness, and frequently in deformity. Few men believe corns to be of so serious a nature; hence their readiness to attribute these effects to other causes. When they investigate, as I have done,

[illegible] and their error. Ossification, navicular-joint disease, founder, and a variety of other diseases, are frequently due to contraction of the feet. Another evil in shoeing, which is calculated to do much mischief, is the fitting of the shoe to the foot while red hot. This has been a source of complaint throughout all Europe. In this country there is little thought of it, to such an extent does the practice prevail. The application of the shoe in this condition, if performed by a careless workman, frequently is the cause of much mischief, and under the most favorable circumstances, performed with all possible care, causes an unhealthy secretion of horn for a long time after, rendering the animal less sure-footed, and often causes lameness to follow its application. The shoe should in all cases be fitted to the foot, and not the foot to the shoe. This of course would be attended with more labor; hence the unwillingness of smiths to do it. Better would it be for the owner to pay double the price for shoeing his horse than to have injury done by the application of the red-hot shoe. In almost all European countries, within the last few years, the smith has been much benefited by the rapid advances made toward perfecting this important branch of labor, mainly through the efforts of our professors in the various veterinary colleges pointing out, as they have done, the evils of this shoe and the benefits of that one.

The varieties worthy of mention are as follows: Prof. Coleman's frog-bar shoe, James Turner's unilateral shoe, Mr. Friend's frog-pressure shoe, and Mr. Percival's sandal. Many other varieties have been introduced from time to time, requiring no special remark in a work like this. Prof. Coleman's frog-bar shoe consists of a circular piece of iron, flat on the upper side, about half an inch thick, broader back than front, so as to afford pro-

tection and limited pressure upon the frog, the under surface being nearly flat; the shoe is secured by four nails on either side. This shoe, in some cases, answers a very good purpose in protecting tender feet from concussion.

James Turner's unilateral shoe differs only in its application from the shoe described for healthy feet. It is nailed to the foot, free on the inside, having six nails on the outside and two on the inside toe, with a level bearing for the crust and heels. Mr. Friend's shoe is designed for the communication of frog pressure. It differs from Mr. Coleman's by having the frog-bar separated from the shoe and suspended by a leathern sole—the object of which is also for tender and sore-footed horses.

Mr. Percival's sandal, as originally made, consisted of a shoe and several web bandages, with buckles attached, by which means it was secured to the foot. For many years it was applied in this manner, and supposed to be as perfect in itself as man was capable of making it. More recently, however, Mr. Percival conceiving an idea of its application by means of India-rubber bands, commenced a series of experiments which resulted in the adoption of an endless India-rubber band. This was an improvement at once simple and much to be desired, rendering its application more firm, and less liable to become deranged. This sandal is not intended for general purposes, but only to supply the place of a lost shoe on the road, it being readily applied, and affording equal protection to the foot.

Mr. Goodwin, of London, invented a shoe which has been much extolled. This shoe is concave on the ground surface—supposed to have a greater effect in getting a firm foothold—the upper surface being flat, except at the heels, which are slightly beveled outward,

to facilitate the expansive tendency of the feet. This principle, as far as the bearing surface is concerned, I believe to be the best plan yet discovered for expanding contracted feet, having witnessed the beneficial effects of its application in a large number of cases always with advantage. Great care must be taken that the bevel is little more than a level bearing, as it would do much mischief if beveled sufficiently to force the heels.

PREPARING THE FOOT.

The subject of paring has not escaped the fatality which seems to have attended every matter connected with the foot. The most opposite and contradictory opinions have been expressed regarding it. Where such extremes exist, a line drawn between the two is usually the most correct. We will therefore assume that position. In a state of nature (and we must take her as our guide) the growth of the hoof is about equal to its wear. When the shoe is upon it this wear is prevented. Our object, then, in paring the foot is to make the removal of the hoof equal to the growth of the foot. Where this principle is not observed, we see the effects of not paring in some horses whose shoes are allowed to remain on the feet for some months without being removed—the crust becomes unusually long, the sole thick, the animal tripping at every step. These cases prove the necessity of proper paring as a substitute for the natural wear of the hoof when unshod. In preparing the foot for the shoe, care should be taken to remove all the old stubs, the crust should be lowered from the toe to the heel with the rasp, and the sole should then be carefully pared with the drawing-knife. The bars and the frog require to be trimmed out, removing only ragged or loose por

tions, or such parts as may conceal dirt or other matter producing unhealthy action.

APPLICATION OF THE SHOE.

In applying the shoe to the foot it should not be set back half or three quarters of an inch from the toe—the projecting parts of the wall cut away as is usually the custom. The shoe should be carried fully to the outer margin of the wall. Thus we preserve the wall entire, giving its full bearing surface for the shoe, preserving the wall uninjured. By removing any portion of the crust it is weakened in exact proportion as it is cut away, reducing the space for driving the nails, and increasing the danger of pricking; or, what is as bad, driving the nails too close, to say nothing of the change from the natural form of the foot. It is these abuses which compel us to regard shoeing the great evil of his domestication. The nails should be properly pointed, and not driven too high up—care should be taken to have them as regular as possible. Three nails on the inside and four on the outside are usually all that are required for any purpose. Clips, if used at all, should be small, otherwise they are the frequent cause of an obscure lameness, which is very difficult to manage. The mischief is done by the horn in its downward growth meeting with the resistance which the clip offers, hence the horn is turned inward upon the inside toe, causing pressure upon the sensitive laminæ and coffin-bone, causing inflammation, and, from pressure, the bone is absorbed at the toe, while the soft tissues undergo other permanent alterations of structure, alike destructive of the animal's usefulness.

INTERFERING.

Our first object is to ascertain, if possible, the cause of interfering, and the part which strikes, whether the shoe or the foot. Many horses strike from weakness, or long continued exertion. Particularly is this the case in young animals. Others cut from faulty conformation of the limbs—the toes turning in or out too much is a frequent cause. By applying chalk to the foot which cuts, we readily discover the precise part of the foot which does the injury. Having satisfied ourselves of this, we must for once deviate from our rule in shoeing, by making the shoe straight on its edge at the part indicated, cutting down the crust level with it. By this means the feet frequently work clear. Where this does not succeed, the shoe should be widened in the web at the point where the foot strikes, but not thickened, as is too often done; the natural bearing of the foot must be preserved. Should this, too, fail, there is no resort but a strip of India-rubber, placed between the shoe and the foot, projecting at least a quarter of an inch beyond the shoe. This being soft and elastic, it will not bruise the part struck by the shoe or foot, giving it time to heal, and cause the animal to work clear in traveling. Either one of these plans is successful, if properly applied, in a majority of cases; yet all are unsuccessful in a few cases of natural deformity, or faulty conformation in the limbs.

OVERREACHING.

Many persons regard overreaching as an indication of a bad horse, yet we are compelled to recognize it as a fault in some of the best. It frequently occurs with young horses, on a moderate gait, and disappears altogether on increasing the speed of the animal. It arises

from too great activity of the hind-legs, the fore ones not being able to get out of the way in time. This habit is often brought on by too heavy shoeing in front, and too light shoeing behind. By reversing this principle I have found it to answer an excellent purpose. Where this habit is allowed to go unchecked, the heels often become bruised, and in some instances the shoes are torn off from the front-feet, causing much mischief to arise in consequence. This habit, too, like interfering, occurs in young horses after severe driving, from becoming leg-weary, a circumstance which should be carefully avoided, as habits are easily formed, but often most difficult to be got rid of. The preservation of the horse's feet depends very much upon careful and skillful application of the shoe, independently of its being constructed on correct principles. Many horses with very bad feet are enabled to go sound for many years by careful shoeing, while a bungling hand would render the same animal unfit for service in a single shoeing. It requires considerable tact to fit a shoe properly on a bad or weak foot, so as to protect it from injury.

STOPPING THE FEET.

The hoofs of horses standing upon plank floors soon become excessively dry and hard, unless artificial means are resorted to to prevent it; and if shod in this state, it is almost impossible for the smith to pare them. The opponents of stopping, and there are a few, offer as an objection that it sometimes tends to produce thrush. This I do not pretend to deny where such stopping as cow-dung is resorted to, but it does not occur when linseed-meal is used for that purpose. This certainly is the best and cleanest application, and can be used several times by softening with a little water. To keep the soles

moist and healthy, the feet should be stopped every night in the summer, and every third night in winter. If the crust is brittle, as is frequently the case, it is a good plan to apply a mixture of tar, lard, and turpentine, equal parts, to the hoof.

SHOEING HORSES FOR CORNS.

Care must be taken that the corn be well cut out, and a little butter of antimony or muriatic acid applied to the part affected. The hoof from the corn backward must be cut away so that no part of the heel strikes the shoe, avoiding pressure, and relieving the part from unnecessary concussion. A horse thus shod, no matter how bad his corns may be, will travel sound, and with perfect ease, that otherwise shod would be decidedly lame.

SHOEING FOR QUARTER-CRACK.

To remedy this evil requires care and judgment. A horse should be shod upon the same principle precisely as for corns—a bar-shoe, often recommended, is unnecessary. Properly shod, there will be but little trouble in growing out a sound hoof. The least pressure upon the heel of the shoe will be sufficient to prevent the hoof from growing down, and thus defeat any efforts which may be made toward remedying the injury. So soon as three eighths or half an inch of new horn has grown down, the roof should be burned with a red-hot iron just above the crack, at right angles with it, which will prevent its breaking up anew. A little tar or hoof ointment should be kept upon the part, which will protect it from dirt, and assist in hastening the growth of the new horn, usually requiring from six to nine months for the crack to grow out.

DISEASES OF THE HORSE.

INFLAMMATION

From *Inflammo*, to burn, is one of the most common forms of disease presented to the Veterinary Surgeon, and regarding which many erroneous opinions have prevailed, in consequence of which much injury and often serious consequences have resulted. Sound medical practice must be based upon sound medical principles. A correct understanding of the term inflammation will assist us very materially in understanding the pathology of diseases in their most complicated forms. A few years since, every form of disease occurring in our domestic animals was regarded and treated as some form of inflammation; purging and bleeding were the order of the day. How different the practice of the present time!

The manner in which inflammation has been written upon has made it a subject perfectly bewildering to the general reader, and from its being associated with every thing in actual practice, no idea of a very definite kind with regard to it will for a long time occur to his mind. With a view to overcome this difficulty, we will give the most simple definition of the term inflammation. It is, "An unnatural or perverted action of and in the capillary blood-vessels of a part; attended with redness, throb-

bing, swelling, pain, heat and disorder of function, with change in both its fluid and solid constituents, as well as with more or less general disturbance of the system." The extent to which structures in a state of inflammation will swell, varies considerably, depending upon the vital and physical characters of the tissues involved. Muscular tissue becomes very much swollen, while, on the other hand, horny and cartilaginous tissues swell but little, in consequence of their low state of vitality. It must be remembered that it requires an assemblage of the above conditions to constitute inflammation. Swelling, pain, heat, or redness alone do not constitute that condition, as either may occur from causes independent of any inflammatory action whatever.

We now feel prepared to proceed with our remarks upon the various diseases with which the horse is afflicted, with a better understanding regarding the interest of our readers, than we would have done had we passed this subject by unnoticed.

Capillaries.—The blood is the pabulum from whence is elaborated the entire organism, as well as the source from whence are derived all the various secretions and excretions of the system; but in order that these purposes may be accomplished, it is necessary for the fluid in question to be circulated through, or its materials brought in contact with, every tissue requiring fresh nutrition, as well as through the various secretory and excretory organs. To effectually accomplish this, we find a class of structures set apart and admirably adapted in every way to fulfill the purposes required. The first of these is the heart itself; next come the large blood conduits, the arteries, which spring from the former, as the tree springs from the earth; while the arteries, again, terminate in a series of vessels of wonderful

minuteness, just as the boughs of a tree terminate in the twigs. These minute vessels are denominated capillaries. These capillaries ramify, and are placed in the most intimate relation with every tissue throughout the body within whose substance reproduction and decay are in perpetual operation, as well as with those organs whose duty it is to furnish or separate the secretions and excretions already referred to. Each tissue selects from the common pabulum—the blood—thus sent to it, the peculiar principle it requires to support its own life and integrity.

The usual terminations of inflammation are resolution, mortification, suppuration, ulceration, hemorrhage, effusion, hepatization, and ossification. By *resolution* is meant the state of the tissues after their recovery from the effects of inflammation.

Mortification is loss of vitality or death of the tissues involved.

Suppuration—A collection of purulent matter, which receives the name of abscess.

Ulceration—A purulent solution of continuity of the soft parts arising from loss of substance.

Hemorrhage occurs as a direct or indirect consequence of inflammation, from ulceration penetrating through the coats of an artery.

Effusion—An exudation of serum, watery accumulations, as in dropsy.

Hepatization—Conversion of a texture into a substance like liver.

Ossification—Formation of bone—change of soft structures into bony ones.

The account we give is necessarily brief, but we trust it is sufficient to furnish the reader with a clear concep

tion of the matter in hand, and in turn enable him to clearly comprehend that which is to follow

DISEASES OF THE MOUTH—LAMPASS.

All young animals, during the period of dentition, have a fullness or swelling of the gums and bars, or roof of the mouth. In many colts it occasions but little or no inconvenience, while in others the pain is so great as to interfere with their feeding. When this condition exists, do not resort to the barbarous practice of burning with a red-hot iron, but act humanely. Lance the bars with your pocket-knife, if you have nothing better, as your family physician would lance the gums of your child under similar circumstances, and in a few days the animal will feed as usual.

BAGS, OR WASHERS.

These are soft, puffy swellings of the lining membrane of the mouth, caused by the bit bruising the parts in reining. If inconvenient to the animal, they may be removed by cutting off a portion of the swollen parts with a pair of scissors or a knife, after which apply a little alum-water, or equal parts of tincture of myrrh and water, to the wound two or three times a day.

SORE MOUTH.

This occurs from the same causes, and is situated usually at the angles of the mouth. Equal parts of tincture of myrrh, tincture of aloes, and water is the best application we can make.

UNEVEN TEETH.

The molar teeth of the horse very frequently become sharp and irregular, interfering with mastication to such an extent as to cause the digestive organs to become

impaired, giving rise to an unhealthy condition of the system. At times the insides of the cheeks become lacerated by their sharp edges, causing them to become tumid and sore. These cases can only be remedied by the use of the horse-rasp, an instrument made for the purpose.

WOLF-TEETH.

These are two small teeth which make their appearance immediately in front of the upper molar teeth, in all colts at some period from the first to the fifth year. It is supposed by very many horsemen that they exert an evil influence over the eyes of the horse. My experience does not prove the fact, and I can not reconcile my mind to believe that they, natural teeth, should be placed in the mouths of all colts, if they were injurious to the eyes or any other organs of the body. If you want them removed, the best plan is to extract them with a pair of dentist's forceps. In knocking them out, the roots are frequently left behind, and of course your object is not accomplished.

CARIES OF THE TEETH.

Caries, or decay of the teeth of horses, is a disease of frequent occurrence. The silence of veterinary writers upon the subject has caused it to be overlooked by those having the care of that useful animal, and the symptoms in consequence have been confounded with those of other diseases.

Symptoms.—Occasionally we have a fetid breath, fetid discharge from one nostril, a wheezing in the head, food improperly masticated, passing away undigested, quidding, drowsing, hide-bound, staring coat, tucked up belly, tossing the head, stopping short on the road, shaking his head and starting on again, and at times

becoming almost unmanageable. These symptoms do not all occur in the same animal; one appearing drowsy, requiring the whip to urge him on, while another, at times, is wild and frantic with pain, taking the bit, and becoming troublesome to manage, occasionally running away. Some of those symptoms occur in other diseases; but we should not overlook the teeth in our examination when any of the above symptoms appear. The only remedy is the extraction of the diseased teeth.

DISTEMPER.

All catarrhal affections are classed under one general head, namely, distemper, by horse-owners generally; a common cold, sore throat, influenza, bronchitis, and several others are regarded as distempers. We will endeavor to make the distinction in such a manner that each form of disease may be readily discovered, and the proper remedies applied. Distemper, as we should understand it, is the mildest form of catarrhal affections. A common cold, for instance, is an inflammation of the lining membrane of the nose, causing a secretion of mucus, which is more or less abundantly discharged from the nostrils; in severe cases the inflammation extends down the *trachea*, or windpipe, to the bronchial tubes, and sometimes to the lungs, producing diseases which are classed under different heads, and often requiring different treatment.

SORE-THROAT.

This is usually one of the first indications of catarrh, and when confined to that portion of the throat at the angle of the jaws, it is termed laryngitis. The symptoms of this disease are well marked: the head is stiff, and if the throat is rubbed or pressed upon, excites coughing

the animal manifests difficulty in swallowing, and frequently considerable saliva collects in the mouth.

Treatment.—Apply strong mustard made into a paste with vinegar, to the throat, and rub it well in; or, linseed oil two parts, with spirits of hartshorn one part, will answer a good purpose. Give upon the tongue half a tea-spoonful of powdered saltpetre twice a day.

STRANGLES.

This is a more severe form of laryngitis, involving the glands of the throat, causing very great swelling, which often threatens suffocation; the respiration becomes disturbed, the breathing laborious, and can be heard at a considerable distance: the animal sweats from his convulsive efforts to breathe, and, if not relieved, dies a violent death. Here the aid of the qualified veterinary surgeon is absolutely required, as there are few persons competent to perform the operation of tracheotomy, that is, opening the windpipe to admit air into the lungs: this, early performed, frequently saves the animal's life.

Treatment.—Poultice the throat well with flax-seed meal, steam the nostrils two or three times a day; and as soon as the swelling under the jaws becomes soft, it should be lanced. When relief is once obtained, the further treatment of these cases is the same as for ordinary sore-throat.

INFLUENZA.

Spring and fall are the seasons most productive of epidemic catarrh. One year it assumes a mild form, the next, perhaps, a most malignant one. Influenza is known to horsemen under the common name of pink-eye distemper.

Symptoms.—These vary very considerably in different animals. The usual or leading symptoms are: Slight

watery or thin mucous discharges from the nose, eyelids presenting a reddish or orange-red appearance, matter collects in the corners of the eyes, pulse feeble, great debility, as shown by the quick, feeble action of the heart —a symptom rarely absent—membrane of nose much reddened, sore-throat and cough: occasionally the feet become fevered as in founder, causing much stiffness, which may be easily mistaken for that disease.

Treatment.—This being a typhoid disease, requires a sustaining treatment, or our success will be very doubtful. In the early stage of the disease, give, the first two days, ten drops of tincture of aconite, or bryona, in a little water, every six hours; after which give in a pail of water, to drink once a day, one ounce of spirits of nitre, or two drachms of extract of belladonna; and give in the feed, three times a day, one of the following powders: Gentian root, saltpetre, and anise-seed, of each one oz.—sulphate of quinine, one drachm; mix and divide into eight powders; or, powdered cinchona and powdered quassia, of each 2 oz.; powdered anise-seed, 1 ounce; mix and divide into four powders. The throat should be bathed in mustard and vinegar, or with linseed oil 3 oz., spirits of hartshorn 1 oz., mixed together. No hay or corn should be given, but scalded oats and wheat bran, with linseed tea or oatmeal gruel, should constitute the diet; a few carrots would be very good, and above all, good nursing is very desirable.

BRONCHITIS.

This is an inflammation of the bronchial tubes, as its name implies, the air-tubes of the lungs. It is usually preceded by a shivering fit, the mouth is hot and full of saliva, the throat is sore, and if pressed upon excites a painful cough, discharge from the nose, appetite lost,

pulse quick, and respiration labored, eyelids and nostrils reddened; on applying the ear to the side, a gurgling sound is heard.

Treatment.—Give the following ball in the early stage of the disease: Nitrate of potassa, pulverized digitalis, and tartrate of antimony, of each half a drachm, molasses sufficient to make the ball. If the fever is not broken in twelve hours, repeat the ball. As soon as the desired object is obtained, give one of the following powders twice a day, in a sloppy mash: Nitrate of potassa one and a half ounces, nitrate of soda six ounces, divide into six powders; or give the following: Extract of belladonna 1 drachm, spirits of nitre 1 oz., solution of acetate of ammonia 4 oz., in half a pint of water, as a drench. The throat and sides should be blistered; the ordinary fly blister made thin with turpentine is very good, or mustard mixed with equal parts of water and spirits of hartshorn. Either of the above, when used, should be well rubbed in with the hand.

NASAL GLEET.

This is a chronic discharge, from one or both nostrils, of a whitish muco-purulent matter, the result usually of neglected catarrh. The general health of the animal does not seem to suffer; he looks well, feeds well, and works well; yet we have this discharge, which is caused by weakness in the secretory vessels of the lining membrane of the nose. The successful treatment in all cases where this disorder has existed, has been on the tonic principle; bleeding and purging are positively injurious. Give one of the following powders night and morning: Sesquichloride of iron 2 oz., powdered cinnamon 1 oz., mix and divide into four powders; or carbonate of iron, pulverized gentian, and pulverized quassia, of each

1 oz., divide into 4 powders; or nux vomica pulverized, ½ oz., linseed meal, 2 oz., divide into 8 powders. Another good preparation is muriate of barytes, ½ oz., linseed meal, 1 oz., divide into 8 powders.

PNEUMONIA.

This disease is known to horsemen as lung fever. It is either inflammatory or congestive, arising from various causes — as high feeding, badly-ventilated stables, violent exercise, or sudden changes from heat to cold. In the congestive stage there is no pulse to be found, and on applying the ear to the side, no sound is heard; cold sweats bedew the body, the respiration is labored, eyes wild in their expression, legs cold, the animal appears dull and stupid, and with difficulty made to move; he does not lie down. In these cases medicines are not required; in fact, they often do more injury than good; the free and speedy use of the lancet is our only hope, and a pure air is of the greatest importance; a pail of cold water should be placed before the animal, but no food should be given until the animal is relieved; and then only mashes of wheat bran. Under this treatment he will speedily recover, or inflammation of the lungs will be established. The pulse now becomes quick, the mouth hot, legs cold, head hanging in or under the manger, appetite lost; on applying the ear to the side, a crepitating or crackling sound is heard; respiration quick; the treatment here must be prompt and energetic; blisters to the sides, such as previously spoken of, must be used, and give internally two ounces of spirits of nitre in a half-pint of water; follow this in two hours with ten drops of tincture of aconite in water, to be given every six hours until relief is obtained; or give instead one of the following powders: Tartrate of anti

mony, pulverized digitalis, of each one drachm; nitrate of potassa, one ounce; mix and divide into eight powders; give one every four hours upon the tongue. Injections of soap and water are very useful in these cases. The legs should be hand-rubbed, and stimulated with mustard or cayenne pepper, and then wrapped in woolen bandages; a pure atmosphere and good nursing are very necessary

PLEURISY.

This is an inflammation of the lining membrane of the chest and covering of the lungs. The symptoms are: Uneasiness, pawing, looking at the sides, pulse quick, pain on pressure over the ribs, body hot, lying down but rising quickly. The same treatment as in inflammation of the lungs is called for; but under no circumstances should bleeding be resorted to. These cases are very apt to terminate in hydrothorax, or

DROPSY OF THE CHEST.

Symptoms.—Breathing short and quick, legs straddling, pulse small and quick; breast, belly, and sheath swell, and leave the mark of the finger when pressed upon; the animal stands until he dies. The treatment of this disease, as a general thing, is not very satisfactory. The iodide of potassa, in half-drachm doses, three times a day, has proved the most useful medicine in such cases, in connection with setons in the breast and sides.

BROKEN WIND, OR HEAVES.

This disease is well known to horsemen; so we will content ourselves merely by giving the most successful remedies, which, for the most part, are only palliative. Divide half an ounce of pulverized digitalis in twenty

parts, and give one part night and morning in the feed until gone; this will usually allay all signs of the disease in two weeks. Or, take assafœtida, two drachms; camphor, one drachm; mix and give every other night for a week.

INFLAMMATION OF THE BOWELS.

This disease may appear suddenly, or it may be slow in coming on. The symptoms resemble those of colic, with which disease it is often confounded. The pulse is our certain guide in determining the character of the disease: when that is full and natural, or nearly so, there is no inflammation; if full, strong, and quick, there is inflammation; other symptoms corresponding, there is no difficulty in determining the case. In colic, the symptoms of pain are intermittent; in inflammation of the bowels, there are no intermissions. Other symptoms which are present in both diseases are pawing, kicking the belly, rolling and tumbling about, sweating, haggard expression of countenance, looking at his sides, etc.; in colic, the legs usually are warm; in inflammation of bowels, they are cold.

Treatment.—Bleed freely from the neck-vein, and give ten drops tincture of aconite every three hours; apply blankets saturated with hot water to the entire body, and keep it up for two hours; then remove the wet ones and replace them with dry ones, well secured with a body-girth. Injections of tobacco-smoke are very useful in these cases; when not convenient, soap and water will answer the purpose. No food of any kind should be given for at least forty-eight hours.

DIARRHEA.

The cause of this disease exposure to cold, over

exertion, change of water, over-doses of cathartic medicine, etc.

Treatment.—Give one of the following powders every six hours until the bowels are checked: Powdered opium, one drachm; powdered catechu, two drachms; prepared chalk, one ounce; mix and divide into four powders.

COLIC.

This disease—known also as gripes, cramp, and fret—is either spasmodic or flatulent. Spasmodic colic is a spasmodic contraction of the muscular coats of the intestines, causing griping pains, etc., (see inflammation of bowels.) Flatulent colic is an accumulation of gas in the stomach and intestines, generated by fermentation in the stomach, causing swelling of the abdomen, and sometimes rupture of the stomach.

Treatment.—For spasmodic colic, give one ounce tincture opium and one ounce sulphuric ether in half a pint of water; this should be repeated in half an hour if relief is not obtained. Or, give the following: Tincture of opium, one ounce; aromatic spirits of ammonia, half an ounce; extract of belladonna, one drachm; water, one pint; mix. In flatulent colic give chlorate of potash, one half ounce; sulphuric ether, one half ounce; tincture of aloes, three ounces; water, one pint; mix and drench.

WORMS.

Thousands of animals die annually from the ravages of these pests, without the true cause being suspected: especially is this the case in the young of the mare, cow, sheep, and pig. Many varieties of these parasites belong to our domestic animals which have not been mentioned by veterinary writers; they are found in every tissue of the body, even to the blood. The symptoms of

worms have been but very imperfectly described by writers upon the subject. In an experience of many years, I have observed the following symptoms, but not all in the same animal. Each variety of worm has its characteristic symptoms, namely: In bots, we rarely have loss of condition, but, when the bots become troublesome, colicky pains, gasping, quickened respiration, staring or haggard expression of the eye, with a strong tendency to inflammation of the bowels will be observed. Bots are rarely troublesome except when passing away in their regular manner, which occurs from May to August in each year. In most other varieties of worms the symptoms are debility, feebleness, sluggish movements, emaciation, staring coat, hide-bound, and skin covered with scurvy blotches, rigidity of loins, small and feeble but slightly accelerated pulse, respiration slow, tucked-up belly, a peculiar, pallid appearance of the lining of the lips, (a certain indication,) irregular, capricious, but persistent appetite, badly digested fæces, agitation of heart and tail; and where the fundament worms exist, a whitish or yellowish-white substance will be found about the fundament, indicated also by rubbing the tail.

The treatment for worms has been attended with much uncertainty heretofore, and is, to the present day, with practitioners generally. Those on which most dependence has been placed are: Calomel, one half drachm; tartrate of antimony, one half drachm; linseed-meal, one half ounce; mix and give at night. Or, iron filings, two drachms; common salt, one half ounce; powdered savin, one drachm; linseed meal, one half ounce; mix, give every night for a week. Or, assafœtida, two drachms; calomel, one and a half drachms; savin, one and a half drachms; oil male fern, thirty drops; linseed-meal, two

drachms; mix with molasses and give at night. O calomel, one drachm; powdered wormwood, one ounce honey sufficient to make the ball; give at night. Follow either of the above with the following ball: Barbadoes aloes, one ounce; pulverized gentian, two drachms, pulverized ginger, one drachm; water sufficient to make the ball. Another remedy highly recommended is the following: Barbadoes aloes, six drachms; male fern, four ounces; spirits turpentine, two ounces; mix and divide into six balls; give one three times a day.

RETENTION OF URINE.

This is known by frequent but unsuccessful efforts to stale. In some animals it arises from a dislike to spatter their legs in voiding the water; hence a horse will frequently retain it in the bladder until the litter is shaken up under him, when he will at once relieve himself. When the result of spasm of the neck of the bladder, an instrument is used called a catheter, made expressly for the purpose; this is passed up the urinary passage to the bladder, when the water will flow freely and give instant relief.

PROFUSE STALING.

The causes of this disease are, the improper use of diuretic medicines, as saltpetre, rosin, etc. Unwholesome food will sometimes produce it. Treatment: Give one of the following balls every night—powdered opium ½ oz., powdered kino, 1 oz., prepared chalk, 1 oz.; mix with molasses and make six balls.

STONES IN THE BLADDER.

These may exist a long time in the bladder before any symptoms arise indicating their presence The first

symptoms of stone are, frequent efforts to urinate, voiding small quantities usually of a thick whitish color; as the stones increase in size, the symptoms become more aggravated, colicky pains are indicated, rendering it difficult to distinguish the difference; the animal paws, kicks at his belly, lies down, rolls, and gets up quickly. In some cases these obstructions are dissolved by the administration of muriatic acid, 2 dr., in a pail of water once a day. Where this fails, an operation for the removal of the stone is the only remedy. This is not a dangerous operation, comparatively, in the hands of a skillful surgeon.

QUITTER.

This is a formation of pus between the hoof and the soft structures within; a sore at the coronet or upper part of the foot, which at first is a hard smooth tumor, soon becoming soft, and breaks, discharging quantities of pus. Treatment: Poultice the foot for several days with flax-seed meal. As soon as the hoof becomes soft, cut away all loose portions, but no more, and inject with a syringe either of the following once a day: Chloride of zinc, 2 dr., dissolved in 1 pint of water; or sulphate of zinc, 1½ dr., dissolved in one pint of water; or nitrate of silver, 2 dr., in a pint of water; or glycerine may be used with advantage. Before using the wash have the foot well cleaned with castile soap and water.

THRUSH.

This is a disease of the frog, causing a discharge of matter from its cleft or division, occasionally causing lameness. The treatment is simple and effective: Wash the feet well with soap and water, and sprinkle a small quantity of pulverized sulphate of copper in the cleft,

and secure it by pressing a little raw cotton down upon it in such a manner as to keep out the dirt. In two or three days repeat, if necessary. It rarely requires a second dressing.

CANKER.

This is a more aggravated form of thrush, often proving very troublesome to manage. It is a continuation of the thrush between the horny frog and the internal structures of the foot, causing separation between them. Treatment: Cut away all the horn which has been separated from the soft structures of the foot, and apply the following ointment: Take equal parts of pine tar and lard, melt over a slow fire, and add sulphuric acid very slowly until ebullition ceases; or use collodion, ½ oz., castor oil, 1 oz.; mix and apply to the parts. The foot must be protected from dirt by a bandage or a leathern boot.

SCRATCHES.

This disease is well known to all horsemen. Treatment: Wash the parts well with castile soap and water, and when dry apply once a day the collodion and castor oil recommended in canker; or use a saturated solution of the bichloride of mercury once a week, but not oftener, or mischief may arise in consequence of a too free use

GREASE HEELS.

This is a white, offensive, greasy discharge from the heels of the horse; the skin becomes hot, tender, and swollen; the acrid character of the discharge often causes large portions of the skin to slough away, leaving an ugly sore behind Treatment: Open the bowels with the following ball: Barbadoes aloes, 1 oz., pulverized gentian root. 2 dr., pulv. ginger, 1 dr., water sufficient

to make the ball; wash the parts well and poultice for two or three days with the following: Flax-seed meal mixed with a solution of 2 dr. sulphate of zinc to a pint of water, after which keep clean and bathe frequently with glycerine; or the solution of zinc, or a solution of the chloride of lime may be used; or the bichloride of mercury may be used in inveterate cases with good results, provided it be not repeated oftener than once a week.

WATER-FARCY.

Anasarca, as it is technically called, is of two kinds; one occurring in young animals from inflammatory action, the other in old horses from general debility. It is known by swelling of the legs, belly, sheath, and other parts. In young animals, there is heat, and pain on pressure on the swollen parts; in old horses, there is no pain on pressure, but the marks of the fingers are left behind. Treatment: Give one of the following powders night and morning in the feed; sulphate of iron, 2 oz., nitrate of potassa, 1 oz., pulverized gentian, 1 oz., pulverized ginger, 6 drs., anise-seed, ground, ½ oz.; mix and divide into 8 powders; or, sulphate of copper, nitrate of potassa, and pulverized gentian, of each 1 oz.; pulverized ginger, ½ oz., anise-seed, ground, 6 drs.; mix and divide into 8 powders. Hand-rubbing and moderate exercise every day are very important, with a pure atmosphere in your stable.

FOUNDER.

This disease occurs generally in the horse with hard, brittle, or contracted hoofs, in consequence of their inability to yield to the weight of the animal. In this condition they wait for the exciting or immediate cause to develop the disease. These causes are a hard

drive upon a hard road, watering when warm, particularly when pump or spring water is used, standing in a draught of air, etc. Symptoms: Fore-feet thrown forward resting upon the heels, weight of the body thrown back upon the hind-legs, front-feet hot and tender, pulse full and quick, respiration accelerated; the animal in very severe cases seeks relief by lying down. Treatment: If the animal is in full condition, bleed freely from the feet, and give the following: Barbadoes aloes, 6 dr., croton oil, 6 drops, pulverized ginger, 1 dr., pulverized gentian, 2 dr., mix with water in form of a ball; foment the feet well with hot water, and then poultice with flaxseed meal for several days; give in the water every 6 hours extract of belladonna, 1 dr. Under this treatment the worst cases usually recover in one week's time if taken in hand early.

POMICED FEET.

This disease is known to horsemen as falling of the sole, and is the result of neglected founder. Careful shoeing, so as to protect the sole, is all that can be done in these cases.

NAVICULAR-JOINT LAMENESS.

Coffin-joint lameness, as it is commonly called, is one of very common occurrence, and the symptoms often so obscure as to mislead the ordinary observer. This disease generally is preceded, for months before lameness is observed, by pointing; that is, by advancing one foot whenever the animal is at rest. The degree of lameness varies considerably in different animals. In one case it is seen in the first half-mile's travel only; in others it continues for a mile or two, and then disappears; in some it continues during a journey; but as the animal gets warmed up, it is not so severe as on the start. In

some cases it disappears for weeks together, and then shows itself again, gradually increasing in intensity until it becomes a permanent lameness. In the early stages of the disease there is no heat to be discovered about the foot, no swelling, no pain on pressing the heels; the animal picks up the foot nicely, but drops it tenderly, striking the toe first; the shoe, therefore, is worn considerably at the toe and very little at the heels. Should a horse be slightly lame in both feet, the symptoms are still more obscure and difficult to diagnose. The action of the horse now becomes changed; he no longer bends his knees with the same freedom as before; he steps short, the heels scarcely touching the ground, which is a good indication of the disease.

Treatment.—In recent cases, the application of a proper blister is usually successful; the common fly blister, thinned with spirits of turpentine, answers a very good purpose; or the following, which must be used with great caution to prevent its leaving a blemish behind: Powdered cantharides 2 drachms, oil of turpentine 2 drachms, powdered euphorbium 1 drachm, oil of origanum 1 drachm, hog's lard 2 ounces. Mix all together. This should not be repeated after the blister acts. In cases of long standing, a seton put through the frog will often be of great service in restoring the animal to usefulness.

OSSIFICATION OF THE LATERAL CARTILAGES.

These cartilages are two gristly projections or wings attached to the coffin-bone at the heels, and may readily be felt above the hoof. From contraction, corns, and other causes, these elastic bodies often become changed from gristle to bone in consequence of inflammation, leaving the horse with thick heels and a short, tender

tread in traveling. The treatment in these cases is only palliative in its confirmed state; the same treatment as for navicular-joint lameness is proper.

SHOULDER STRAIN.

This arises from slipping, severe blows, falling in the shafts, etc. The symptoms are all well marked. The animal, instead of raising the foot, drags the toe on the ground in walking; on making a lever of the leg, by bringing it forward, the animal manifests much pain; these usually are positive symptoms.

Treatment.—Bleed freely from the Plantar vein running down upon the inside of the front-legs. Foment the shoulders well with hot water if the case is a recent one. If of long standing, a seton will be more effective. The following liniment will be a useful application: Sweet oil 1 pint, spirits of hartshorn 3 oz., spirits of turpentine 2 oz.; mix all together; shake well before using. Or, alcohol 1 pint, spirits of camphor, tincture of myrrh, castile soap, of each 1 oz.; mix all together; or oil of turpentine 1 oz., tincture of opium 1 oz., soap liniment 1 oz., tincture of capsicum 1 dr.; mix all together.

CAPPED HOCK.

This is a bruise of the cap or point of the hock-joint, forming a serious abscess.

Treatment.—Apply the blister recommended in coffin-joint lameness. Tincture of iodine or iodine ointment is sometimes useful.

BONE SPAVIN.

This is one of the most common causes of lameness in the hind-legs. Spavin arises from strains, sprains, or blows upon the hock-joint, causing an inflammatory con-

dition of the cartilaginous cushions which cover the uniting surfaces of each bone or of the ligaments that surround the joint and bind the bones together; sometimes both are involved. This inflammatory condition of the joint may be considered the exciting cause of spavin, and, if not speedily removed, spavin soon follows; the synovial fluid, commonly called-joint oil, is soon absorbed, the cartilages of the joint are turned to bone, which unite one with the other, forming one solid mass, destroying the mobility of the parts involved, and constituting what is technically called anchylosis of the hock-joint. This union of the bones is not always general, there being in many cases but two, three, or four of the bones involved. When these changes are confined to the cartilages, there is no external enlargement; on the contrary, when the ligaments surrounding the joint are involved, we have in all cases external enlargement. When the hock receives an injury, the course of treatment usually pursued by horsemen is very pernicious. The application of a blister to an inflamed surface must do injury by increasing the inflammation they wish to abate, and in many cases actually producing a spavin where it otherwise would not exist. I do not deny that blisters are necessary and useful in such cases, if properly applied; but the idea of rubbing blisters on an inflamed surface, to reduce it, is like throwing shavings on burning coals to extinguish them. The educated physician, in applying a blister, does it so as to draw the inflammation from the part affected to a part where it will do no injury; otherwise, it had better not be applied at all. When the disease has advanced so far as to produce alteration of structure in the part, the application of blisters is proper, not for the purpose of curing the disease, but with a view of removing the

lameness, by increasing the inflammation, thereby causing a more speedy union of the diseased bones, which, when perfect, causes the animal to travel sound. The seton I have found the most successful in long-standing cases. In the early stages, that is, before any alteration of structure takes place, the application of cold water to the parts will often abate the inflammation, or a blister applied above or below the hock will have the desired effect. Cooling embrocations, such as vinegar and water, are also good. When there is external enlargement, active blisters should be applied over the part. Liquid blister: powdered croton seeds ½ oz., powdered cantharides 1 oz., oil of turpentine 1 pt., olive oil 1 pt.; mix all together and shake well before using.

RING-BONE.

This is a disease precisely like spavin, location only giving it a different name. The same alterations in structure take place, the same terminations follow, and the same treatment is called for. Ring-bone, unlike spavin, rarely occurs without enlargement. I have never known of but one case of the kind.

SPLINT.

This is a bony deposit situated between the cannon and splint-bones, well known to all horsemen, rarely causing lameness, except when it is situated so as to interfere with the action of the knee-joint, or at the lower extremity of the splint-bone. Few horses attain the age of eight years without having them; they disappear in time by spreading over a greater surface of bone, becoming flat upon the surface, giving rise to the opinion often indulged in by horsemen that old horses never have splint. Splint is a disease of the same character as spavin, and requires the same treatment.

CURB

This is an enlargement at the back part of the hock, about four inches below the cap, arising from strains, bruises, breaking down of the hock, etc.

Treatment.—In recent cases the part should be bathed with tincture of iodine once a day; or use the iodine ointment. Take a little blood from the sephena vein on the inside of the hind-leg, above the hock. Should this not succeed, blisters must be resorted to; the same applications as are used for spavins are applicable here.

BLOOD OR BOG-SPAVIN.

This is but one disease, a bursal enlargement or an increase in the secretion of the joint-oil causing distension of the capsular ligament which surrounds the joint, causing puffy swellings on the front and inside of the joint, rarely causing lameness. Thoroughpin is the same disease on a more extensive scale, causing the enlargement to extend through the joint from one side to the other. The only successful treatment which I have found, with a few exceptions, is cold-water compresses, placed upon the joint in such a manner as to press upon the swollen parts, and retain them there for six or eight weeks, by means of a leather socket made to fit the joint; the compresses to be changed every day; old muslin or woolen cloth is the best material to use.

PALPITATION OF THE HEART.

This disease is known to horsemen as the thumps, in consequence of the violent action of the heart, causing a jerking or shaking of the entire animal frame, observable at a distance of several yards. This disease is sometimes preceded by an obscure lameness, generally occurring in

the off fore-leg, which in medical language is termed sympathetic.

Treatment.—The worst cases yield in two hours to the following simple treatment: Divide 1 dr. of digitalis into 5 powders, and give one every fifteen minutes on the tongue.

INFLAMMATION OF THE BRAIN.

Mad staggers, as this disease is called, arises from various causes. Blows over the head will produce it, over-feeding, a tight collar, powerful stimulants, etc. Symptoms: The animal at first is dull, and moves with apparent reluctance; the membranes dividing the eye-lids and nose are much reddened, pulse full and quick, appetite lost, a vacant stare about the eyes, ending in delirium or madness. Every thing around the animal is destroyed or injured; he continues his ravings until exhausted.

Treatment.—Open the jugular vein as quickly as possible; this should be done before the mad stage comes on or it is too late to be of much service. Open the bowels freely; give the following: Barbadoes aloes 1 oz., croton oil 10 drops, ginger 1 dr., gentian 1 dr., mix with molasses or honey. Give tobacco-smoke injections if convenient, or soap and water will answer the purpose; give on the tongue every two hours 10 drops tincture of aconite, until 8 doses have been given, and then stop the aconite; give cold water to drink and apply cold-water bandages to the head, or bags of ice would be better; give no food for 12 hours after relief is obtained.

STOMACH STAGGERS.

This disease occurs in horses that are great feeders; in consequence the stomach becomes enormously dis-

tended, causing pressure upon the lungs and heart, interfering with the action of both, and causing a determination of blood to the head, producing stupor, with a tendency to pitch forward, resting the head against a tree or any object which may be in his way; the head often becomes bruised and cut by coming in contact with hard and rough objects; the bowels are constipated, the pulse full and slow, respiration disturbed, etc.

Treatment.—Give the purging ball recommended in inflammation of the brain, and bleed freely from the jugular vein; give no food for 48 hours; this is all the treatment the animal requires. As soon as the bowels are opened, the animal is relieved. Care should be used after recovery not to allow the animal too much provender, and keep the bowls in good order as a preventive of subsequent attacks.

POLL-EVIL.

This disease is said to arise from blows upon the head behind the ears, in going in or out of stables with low doors, pulling upon the halter, etc. Such injuries in animals whose blood is in a bad condition will cause poll-evil; but it can not live in a healthy system. The author's experience convinces him that the disease oftener arises from hereditary causes than from any other, having met with, on several occasions, two and three unbroken colts, from the same mare, affected with this disease; proving, beyond a doubt, the ready transmission of the disease from parent to offspring.

Treatment.—The blood must be thoroughly purified before a cure can be effected. Give the following powder: Pulverized sulphur one lb., black antimony in powder one half lb.; mix together; dose, one table-spoonful morning and night, in the feed. No corn or corn-meal

should be given. Open the bowels with aloes or linseed oil. Lay the tumor open with a knife, and inject into the opening a solution of sulphate of zinc 2 drs., to 1 pint of water, or the tincture of iodine is very good; sulphuric acid is used in some cases, but it is a dangerous remedy.

FISTULA OF THE WITHERS.

This disease is situated on the withers, or the raised line of the back, over the shoulders, and is precisely the same disease as poll-evil, location only giving it a different name. It is more common than poll-evil as ten to one, arising from the same causes, and requiring the same treatment; it yields, however, more readily than the former disease.

GLANDERS.

This loathsome disease has defied medical treatment in all ages of the world. It is one of the most treacherous diseases known to man, being highly contagious, and communicated readily from horse to horse, and from horse to man by means of inoculation. Hence the best treatment is a leaden ball through the brain. Symptoms: A discharge of matter from one or both nostrils, enlargement of one or both glands under the jaw; when one nostril only is affected the gland on the same side is almost invariably enlarged, the membrane lining the nose is pale or leaden in color, with ulcerations upon it The discharge usually sticks to the nostrils like glue, and is sometimes white, but oftener grayish in color. These latter symptoms appear in other diseases of a catarrhal character from an acrid discharge from the nose. Glanders fully developed is not easily confounded with other diseases, as the discharge becomes more glutinous and adheres to the edges of the nostrils more

firmly, with increased tenderness of the swellings under the jaw, which now adheres closely to the jaw-bone; the discharge is somewhat streaked with blood, and of an offensive smell; there is a slight tumefaction of the under eyelid, a swelling or elevation of the bones of the nose or forehead, loss of appetite, debility, sometimes cough, swelling of the legs and sheath, and sometimes lameness without any apparent cause, chancres or ulcerations within the nostrils. When these symptoms appear, the disease soon proceeds to a fatal termination. Since the commencement of the rebellion many experiments have been made with a view to discovering a cure for the disease, and with some prospect of success. The sulphate of soda, in ounce doses, three times a day, has been attended with partial success, and many cases are claimed through the agency of this simple remedy.

FARCY.

This disease I regard as an incipient stage of glanders, or as a type of the same fatal malady, and is, to a certain extent, curable. There are two distinct varieties or stages of farcy; one, which is called button farcy, is altogether superficial, being confined to the lymphatic vessels of the skin, and readily yields to medical treatment; the other variety makes its appearance in the extremities, generally upon the inside of the hind-legs, which become completely engorged, presenting a very uneven or lumpy appearance, excessively tender and painful to the touch. Small abscesses are formed, which at first discharge healthy pus, but soon ulcerate and discharge a thin, sanious matter. These abscesses first make their appearance on the inside of the hind-legs, and then on the fore ones in like manner; the neck and lips come next in turn, and they may appear in all

parts of the body, when glanders will begin to manifest itself.

Treatment.—Give one ounce of the sulphate of soda three times a day; or corrosive sublimate, in ten-grain doses, twice a day; or nux vomica, in ½ dr. doses, twice a day. Sulphate of copper, in 2 dr. doses, has been used with decided advantage. The tumors should be opened, and caustic silver or red-hot iron applied to each.

MANGE.

This is a disease of the skin identical with itch in the human family. The hair comes off in spots which gradually blend together, causing scabby patches; the skin thickens and puckers along the neck.

Treatment.—Take the horse in the sun and scrub him thoroughly all over with castile soap and water, then wash him well from head to tail with gas-water, in which put 2 drs. white hellebore to the gallon. He must now be put in another stall distant from the one in which he has been standing: thus treated, it rarely requires more than one washing to effect a permanent cure. The harness should be thoroughly scrubbed and put away for six or eight weeks. These precautions are necessary to success in this otherwise troublesome disease.

SURFEIT.

This is a scurfy eruption all over the body, arising from an impure condition of the blood, causing plethora in one animal, and general debility, etc., in another. The legs swell, the hair is rough and staring, the membrane lining in the nose presents a bluish cast.

Give the following: Barbadoes aloes 1 oz., nitrate of potassa 2 drs., gentian 1 dr.; make into a ball with water; follow this with the following powder: Nitrate

of potash 2 oz., pulverized sulphur 6 oz., black antimony 2 oz.; mix and divide into 16 powders, give one morning and night

HIDE-BOUND.

Any derangement of the system has a tendency to produce this condition of the skin. Medicines of an alterative character are here indicated; the most successful are: Sulphur pulverized 8 oz., nitrate of potassa pulverized 3 oz., black antimony pulverized 2 oz., sulphate of iron 4 oz.; mix all together and give one table-spoonful twice a day. Or Barbadoes aloes 2 oz., nitre 1 oz., gentian 1 oz.; mix and divide into 16 powders, one to be given night and morning.

LOCKED-JAW.

This is one of the most troublesome and uncertain diseases with which the veterinary surgeon has to combat; it is technically called tetanus. It arises generally from nail-wounds in the feet, sharp, metallic substances taken into and wounding the stomach, or stones in the stomach or intestines; bots are said occasionally to be the cause of locked-jaw, etc., etc. The first symptoms of the disease are observed about the ninth or tenth day after the injury is done, which are a straggling or stiffness of the hind-legs, to which succeeds, in a few days, the following: On elevating the head, a spasmodic motion of the membrane in the inner corner of the eye will be observed, showing little more than the white of the eye, the muscles of the jaws become rigid, the tongue is swollen, and the mouth filled with saliva, the ears are erect, the nose poked out, the nostrils expand, the respiration becomes disturbed, and finally the jaws become firmly set, and the bowels are constipated.

Treatment.—That which I have found most successful is the early administration of the following: Tincture of aconite, two drachms; tincture of belladonna, two drachms; water, one half-ounce; mix and give forty drops every four hours on the tongue. Keep a ball of aloes in the mouth for several days; there is no fear of giving too much; I have frequently given half a pound in the course of a few days, with good results. Hydrocyanic acid, twenty drops in a little water, and put upon the tongue every four hours, is an excellent remedy Foment the jaws with bags of hops steeped in hot water, and bathe the line of the back from the pole to the croup with mustard and vinegar; be careful not to allow the animal to be unnecessarily excited by noises and bustle about him, but go about him very quietly; keep a pail of bran-slop before him all the time. If the foot has been injured, poultice with flax-seed meal and keep the wound open until healthy action has been established.

RHEUMATISM.

This is a common disease in some localities, as it is in the human family; the animal appears stiff and sore, the lameness shifting from one limb to another, the joints sometimes become swollen and painful to the touch, the animal appearing better or worse, according to the season of the year and the condition of the atmosphere.

Treatment.—Open the bowels with the following: Calomel, one drachm; Barbadoes aloes, four drachms; alcohol, two drachms; linseed meal, two drachms; molasses enough to make into a ball; follow this with pine tar, one half-ounce, made into a ball with flax-seed meal; give one every morning. Poultice the feet with flax-seed meal, four parts, ground mustard, one part, for

several days; and bathe the affected limbs with the following liniment: Oil of turpentine, tincture of opium, soap-liniment, of each one ounce; tincture of capsicum, one drachm; mix all together; shake well before using

CRAMP.

This disease baffles the judgment of the most experienced horsemen, often creating unnecessary alarm from the peculiar manner in which the animal is handled.

Symptoms.—The horse appears well in body and limb until efforts are made to move him; he then appears to have lost all power of motion in one of his legs, usually the hind ones; it is firmly planted on the ground, and the most powerful man fails to move it. On compelling the animal to move, the leg drags behind as though it were dislocated. Upon striking him with the whip he frequently will take two or three natural steps, and the leg drags as before.

Treatment.—Hand-rubbing is very necessary, and use the following liniment upon the affected part: Alcohol, one pint; tincture of camphor, one half-pint; tincture of opium, four ounces; mix all together.

WARTS.

When the warts have necks, all that is necessary for their removal is a piece of silk tied tightly around them as closely to the roots as possible; in a few days they will slough away: or if they are larger at their base, pass a needle armed with a double thread through the wart as near the root as possible, and tie each way, so as to cut off the circulation of the blood, and it will soon die and come away; or paint it over with the permanganate of potash once a day for a week; or use the caustic potash in the same manner; either of these remedies usually answer the purpose.

SADDLE-GALLS.

These are too well known to horsemen to require any special remarks regarding their cause, etc.

Treatment.—Bathe the parts two or three times a day with equal parts of tincture of myrrh and tincture of aloes. Or, collodion, one ounce; castor oil, two ounces; mixed together: or, glycerine is a very good remedy.

DISEASES OF THE EYE.—AMAUROSIS, OR GUTTA SERENA.

Commonly called glass eye. In this disease the eyes have a peculiar glassy appearance, with an enlarged or expanded pupil. The eyes are clear and show no indications of disease to the ordinary observer, yet the animal is partially or wholly blind. The cause is paralysis of the optic nerve, the best means of detecting which is to expose the eye to different degrees of light, which, when disease exists, makes no impression on the pupil whatever; while in a sound eye the pupil contracts when exposed to a strong light, and expands when removed to a weaker light, or when removed to a dark place. An animal affected with amaurosis will run against any object in his way, and present all other symptoms of a horse blind from any other cause.

Treatment.—Give a strong purge; follow this twice a day with half-drachm doses of nux vomica, mixed in the feed; apply a fly-blister back of the eye, and give bran mashes for a few days. No corn should be used until the sight is restored.

INFLAMMATION OF THE HAW.

As it is commonly called, also known as the Hooks This a swelling from inflammation of the membrane in the inner corner of the eye, called the membrana nicti

tans; its office or function is to cleanse the eye of dirt or other substances getting into it.

Treatment.—This is simple and effective: Open the bowels with the aloes ball recommended in rheumatism, and apply the following wash: Tincture of opium, one ounce; rain-water, one pint; mix together and bathe the eye three or four times a day. Do not be persuaded to cut out this membrane of the eye, as its removal does injury by impairing its function.

SIMPLE OPHTHALMIA.

This disease arises from some external injury, as a blow upon the eye, or from a foreign body getting into it, causing inflammation to ensue; the eye becomes swollen, very sensitive, and watery.

Treatment.—Open the vein under the eye and let it bleed until it stops of itself. Open the bowels, and use the following wash: Tincture of opium, six drachms; tincture of aconite, two drachms; rain-water, one pint; mix all together, and bathe the eye three times a day: or, use belladonna, one ounce; rain-water, one pint; mix, and bathe the same.

SPECIFIC OPHTHALMIA.

This is called by horsemen moon-blindness, from its periodical appearance; supposed by some persons to be governed by the moon. The eyes in this disease become watery, and a white film covers the entire ball of the eye. When this disease once appears, we may look for its termination in blindness. The eyes may be cleared up a few times, but eventually the animal goes blind.

Treatment.—Open the bowels freely with the aloes ball, and give internally one of the following powders in the feed, night and morning: Colchicum root pulverized,

one ounce; linseed meal, two ounces; mix and divide into twenty powders. Bathe the eye with the following: Belladonna, one ounce; rain-water, one pint: or, nitrate of silver, eight grains; distilled water, four ounces; mix: or, sulphate of zinc, one half drachm; diacetate of lead, one drachm; water, one and a half pints: or, take a piece of sulphate of copper, (blue-stone,) shave it thin and smooth, and pass it carefully between the eyelid and the eyeball twice a day until the eye is cleared up.

CATARACT.

This disease is usually the result of termination of specific ophthalmia, causing an opacity or breaking up of the crystalline lens, situated directly behind the pupil, presenting a white and cloudy appearance in the centre of the eye, and causing partial or total blindness. Little can be done by way of treatment in this disease as it occurs in the horse.

RECAPITULATION OF REMEDIES.

Lampass.—Lancing.

Bags or Washers.—Cutting and apply alum-water or tincture myrrh and water, equal parts.

Sore Mouth.—Tinctures myrrh, aloes, and water equal parts.

Uneven Teeth.—Filing.

Wolf-Teeth.—Extracting with dentist's forceps.

Caries or Diseased Teeth should be extracted.

Sore-Throat.—Mustard paste with vinegar, or linseed oil two parts, ammonia one part, applied outwardly. Powdered saltpetre, half-tea-spoonful upon tongue twice a day.

Strangles.—Flax-seed poultice, steam nostrils, and lancing. Veterinary surgeon if possible.

Influenza.—Tincture of aconite or bryona, ten drops in water every six hours for two days, then spirits nitre 1 oz., extract belladonna 2 dr., in a pail of water once a day. A powder of gentian root, saltpetre, and anise-seed, each 1 oz., sulphate of quinine 1 dr.; mix and divide into eight powders; give three times a day in feed; or powdered cinchona and powdered quassia each 2 oz., pow-

dered anise-seed 1 oz.; mix and divide into four powders, and give three times a day in feed. Bathe throat in mustard and vinegar, or with linseed oil 3 oz. and ammonia 1 oz., mixed.

Bronchitis.—A ball of nitrate of potassa, pulverized digitalis, and tartrate of antimony, each ½ dr., molasses sufficient to make the ball; once in twelve hours till fever is broken; then nitrate of potassa 1½ oz., nitrate of soda 6 oz.; mix and divide into six powders; twice a day in mash; or extract belladonna 1 dr., spirits nitre 1 oz., solution of acetate of ammonia 4 oz., in half pint of water as a drench. Blister throat and sides with fly-blister and turpentine; or mustard, ammonia, and water. Rub in with the hand.

Nasal Gleet.—Give night and morning one of the following powders: Sesquichloride of iron 2 oz., powdered cinnamon 1 oz., mix and divide into 4 powders; or carbonate of iron, pulverized gentian, and pulverized quassia, of each 1 oz., divide into 4 powders; or nux vomica pulverized, ½ oz., linseed meal 2 oz., divide into 8 powders. Another good preparation is muriate of barytes ½ oz., linseed meal 1 oz., divide into 8 powders.

Broken Wind or Heaves.—Divide half an ounce of pulverized digitalis in 20 parts, and give one part night and morning in the feed, until gone; or take assafœtida 2 drs., camphor 1 dr., mix and give every other night for a week.

Inflammation of the Bowels.—Bleed from neck, give 10 drops tincture aconite every three hours, apply hot wet blankets, inject tobacco-smoke or soap and water. No food for forty-eight hours.

Diarrhea.—Give every six hours until checked, pow-

ered opium 1 dr., powdered catechu 2 drs., prepared chalk 1 oz., mix and divide into 4 powders.

Colic, Spasmodic.—Give 1 oz. tincture opium and 1 oz. sulphuric ether in half a pint of water; repeat in half an hour if relief is not obtained. Or, give the following: Tincture of opium 1 oz., aromatic spirits of ammonia ½ oz., extract of belladonna 1 dr., water 1 pint, mix. In *flatulent* colic, give chlorate of potash ½ oz., sulphuric ether ½ oz., tincture of aloes 3 oz., water 1 pint, mix and drench.

Worms.—Calomel ½ dr., tartrate of antimony ½ dr., linseed meal ½ oz., mix and give at night; or iron filings 2 drs., common salt ½ oz., powdered savin 1 dr., linseed meal ½ oz., mix, give every night for a week; or assafœtida 2 drs., calomel 1½ drs., savin 1½ drs., oil male fern 30 drops, linseed meal 2 drs., mix with molasses and give at night; or calomel 1 dr., powdered wormwood 1 oz., honey sufficient to make the ball; give at night. Follow either of the above with the following ball: Barbadoes aloes 1 oz., pulverized gentian 2 drs., pulverized ginger 1 dr., water sufficient to make the ball. Another remedy: Barbadoes aloes 6 drs., male fern 4 oz., spirits turpentine 2 oz., mix and divide into 6 balls; give one three times a day.

Retention of Urine.—Give a ball every night of powdered opium ½ oz., powdered kino 1 oz., prepared chalk 1 oz., mixed with molasses and made into six balls.

Stone in Bladder.—Muriatic acid 2 drs. in a pail of water once a day.

Quitter.—Flax-seed meal poultice till soft, then cut away. Inject once a day: Chloride of zinc 2 drs., dissolved in 1 pint of water; or sulphate of zinc 1½ drs.,

dissolved in 1 pint of water; or nitrate of silver 2 drs., in a pint of water; or glycerine may be used with advantage. Before using the wash, have the foot well cleaned with castile soap and water.

Thrush.—Wash the feet well with soap and water, and sprinkle a small quantity of pulverized sulphate of copper in the cleft, and secure it by pressing a little raw cotton.

Canker.—Take equal parts of pine tar and lard, add sulphuric acid while melting, apply to foot; or use collodion ½ oz., castor oil 1 oz., mix and apply to the parts.

Scratches.—Wash parts in soap and water, and apply once a day: Collodion ½ oz., castor oil 1 oz.; or apply once a week saturated solution bichloride of mercury.

Grease Heels.—Give a ball of Barbadoes aloes 1 oz., pulverized gentian root 2 drs., pulverized ginger 1 dr., water sufficient to make the ball; wash the parts well and poultice for two or three days with the following: Flax-seed meal mixed with a solution of 2 drs. sulphate zinc to a pail of water; bathe frequently with glycerine, or a solution of zinc, or a solution of chloride of lime.

Water Farcy.—Give one of the following powers night and morning in the feed: Sulphat of iron 2 oz., nitrate of potassa 1 oz., pulverized gentian 1 oz., pulverized ginger 6 drs., anise-seed, ground, ½ oz., mix and divide into 8 powders; or sulphate of copper, nitrate of potassa, and pulverized gentian, of each 1 oz., pulverized ginger ½ oz., anise-seed, ground, 6 drs., mix and divide into 8 powders. Rub hard and exercise moderately.

Founder.—If the animal is in full condition, bleed freely from the feet, and give the following: Barbadoes

aloes 6 drs., croton oil 6 drops, pulverized ginger 1 dr., pulverized gentian 2 drs., mix with water in form of ball; foment the fect well with hot water, and then poultice with flax-seed meal for several days; give in the water every 6 hours extract of belladonna 1 dr.

Shoulder Strain.—Bleed freely from the Plantar vein running down upon the inside of the front legs. Foment the shoulders well with hot water if the case is a recent one. If of long standing, a seton will be more effective. The following liniment will be a useful application: Sweet oil 1 pint, spirits of hartshorn 3 oz., spirits of turpentine 2 oz.; mix all together; shake well before using; or alcohol 1 pint, spirits of camphor, tincture of myrrh, castile soap, of each 1 oz.; mix all together; or oil of turpentine 1 oz., tincture of opium 1 oz., soap liniment 1 oz., tincture of capsicum 1 dr.; mix all together.

Capped Hock.—Blister; tincture of iodine, or iodine ointment is useful.

Bone Spavin.—When there is external enlargement, active blisters should be applied over the part. Liquid blister: Powdered croton seeds ½ oz., powdered cantharides 1 oz., oil of turpentine 1 pt., olive oil 1 pt.; mix all together, and shake well before using.

Curb.—In recent cases the part should be bathed with tincture of iodine once a day; or use iodine ointment. Take a little blood from the sephena vein on the inside of the hind-leg, above the hock. Should this not succeed, blisters must be resorted to.

Blood or Bog Spavin.—Use cold-water compresses, placed upon the joint for six or eight weeks, by means

of a leathern socket made to fit. Old woolen or muslin cloth is best.

Palpitation of the Heart.—The worst cases yield in two hours to the following simple treatment: Divide 1 dr. of digitalis into 5 powders, and give one every fifteen minutes on the tongue.

Inflammation of the Brain.—Open the jugular vein as quickly as possible. It should be done before the mad stage comes on, or it is too late to be of much service. Open the bowels freely; give the following: Barbadoes aloes 1 oz., croton oil 10 drops, ginger 1 dr., gentian 1 dr.; mix with molasses or honey. Give tobacco-smoke injections if convenient, or soap and water will answer the purpose; give on the tongue every two hours 10 drops tincture of aconite, until 8 doses have been given, and then stop the aconite; give cold water to drink and apply cold-water bandages to the head, or bags of ice would be better; give no food for twelve hours after relief is obtained.

Stomach Staggers.—Give the purging ball recommended in inflammation of the brain, and bleed freely from the jugular vein; give no food for forty-eight hours; this is all the treatment the animal requires.

Poll-Evil.—Give the following powder: Pulverized sulphur 1 lb., black antimony in powder ½ lb.; mix together; dose, one table-spoonful morning and night in the feed. No corn or corn-meal should be given. Open the bowels with aloes or linseed oil. Lay the tumor open with a knife, and inject into the opening a solution of sulphate of zinc 2 drs., to 1 pint of water, or the tincture of iodine is very good; sulphuric acid is used in some cases, but it is a dangerous remedy.

Glanders.—Sulphate of soda in 1 oz. doses three times a day has been attended with partial success; but powder and ball, applied through the medium of a rifle, is the only *sure* cure we know of.

Farcy.—Give 1 oz. of the sulphate of soda three times a day, or corrosive sublimate in ten-grain doses twice a day; or nux vomica in ½ dr. doses twice a day. Sulphate of copper in 2 dr. doses has been used with decided advantage. The tumors should be opened and caustic silver or a red-hot iron applied to each.

Mange.—Take the horse in the sun and scrub him thoroughly all over with castile soap and water, then wash him well from head to tail with gas-water, in which put 2 drs. white hellebore to the gallon. Put him in a different stable and use a clean harness.

Surfeit.—Give the following: Barbadoes aloes 1 oz., nitrate of potassa 2 drs., gentian 1 dr., make into a ball with water; follow this with the following powder: Nitrate of potash 2 oz., pulverized sulphur 6 oz., black antimony 2 oz.; mix and divide into 16 powders; give one morning and night.

Hide-Bound.—Take sulphur, pulverized, 8 oz., nitrate potassa, pulverized, 3 oz., black antimony, pulverized, 2 oz., sulphate of iron 4 oz.; mix together; give 1 tablespoonful twice a day. Or, Barbadoes aloes 2 oz., nitre 1 oz., gentian 1 oz.; mix and divide into 16 powders, to be given night and morning.

Rheumatism.—Open the bowels with the following: Calomel 1 dr., Barbadoes aloes 4 drs., alcohol 2 drs., linseed meal 2 drs., molasses enough to make into a ball; follow this with pine tar ½ oz., made into a ball with flax-seed meal; give one every morning. Poultice

the feet with flax-seed meal 4 parts, ground mustard 1 part, for several days; and bathe the affected limbs with the following liniment: Oil of turpentine, tincture of opium, soap liniment, of each 1 oz., tincture of capsicum 1 dr.; mix all together; shake well before using.

Cramp.—Hand-rubbing is very necessary, and use the following liniment upon the affected part: Alcohol 1 pint, tincture of camphor ½ pint, tincture of opium 4 oz.; mix all together.

Saddle-Galls.—Bathe the parts two or three times a day with tincture of myrrh and tincture of aloes, equal parts; or collodion 1 oz., castor oil 2 oz., mixed; or glycerine.

Amaurosis.—Give a strong purge; follow this twice a day with ½ dr. doses of nux vomica mixed in the feed; apply a fly-blister back of the eye. Give no corn until sight is restored.

The Hooks.—Open the bowels with the aloes ball recommended in rheumatism, and apply the following wash: Tincture of opium 1 oz., rain water 1 pint; mix together and bathe the eye three or four times a day. Do not be persuaded to cut out this membrane of the eye, as its removal does injury by impairing its function.

Simple Ophthalmia.—Open the vein under the eye and let it bleed until it stops of itself. Open the bowels, and use the following wash: Tincture of opium 6 drs., tincture of aconite 2 drs., rain-water 1 pint; mix all together and bathe the eye three times a day; or use belladonna 1 oz., rain-water 1 pint; mix and bathe the same.

Specific Ophthalmia.—Give in the feed night and morning: Colchicum root, pulverized, 1 oz., linseed

meal 2 oz.; mix and divide into 20 powders. Bathe the eye with the following: Belladonna 1 oz., rain-water 1 pint; or nitrate of silver 8 grs., distilled water 4 oz., mix; or sulphate of zinc ½ dr., diacetate of lead 1 dr., water 1½ pints; or, take a piece of sulphate of copper, (blue-stone,) shave it thin and smooth, and pass it carefully between the eyelid and the eyeball twice a day until the eye is cleared up.

RULES AND REGULATIONS

OF THE

National Association for the Promotion of the Interests of the American Trotting Turf.

ENACTED BY THE NATIONAL ASSOCIATION AT THE ANNUAL MEETING, HELD AT BUFFALO, NEW YORK, ON THE FIRST WEDNESDAY IN FEBRUARY, 1871.

RULE 1. *Mandate.* All trotting and pacing engagements and performances over the several courses which are, or shall be represented by membership in the "NATIONAL ASSOCIATION FOR THE PROMOTION OF THE INTERESTS OF THE AMERICAN TROTTING TURF," and each and every person who shall in any way be concerned or employed therein, as well as all Associations and Proprietors themselves who are or shall become members of said National Association, shall be governed by the following rules from and after February 1st, 1871: [See also Articles 12 and 13 of By-Laws.]

RULE 2. *Entries.* All entries for premiums must be made under cover, enclosing the entrance money for purses and forfeits in sweepstakes, and then sealed and addressed to or deposited with the Secretary, or some person authorized to receive the same, at such time and place as the Associations may have prescribed. Notices of intention to enter will be received by telegraph up to the hour advertised for closing, and all such entries shall be eligible, provided the entrance fee specified shall be paid in due course, by mail or otherwise. [See also Art. 17 of By-Laws.

It shall be the duty of the Secretary, or other person authorized, to prepare the list of entries for publication, comprising all such information in a comprehensive manner, for the enlightenment of the general public and parties to the race; and all entries, as aforesaid, shall be opened and announced at a public meeting, of which reasonable notice by advertisement or otherwise, shall be given to the parties in interest.

RULE 3. *Entrance Fee.* The entrance fee shall be ten per cent. of the purse, unless otherwise specified; and any person refusing to pay his entrance dues upon demand by the proper authority, shall, together with his horse or horses, be suspended until they are paid in full, with an addition of ten per cent. PENALTY, and interest at seven per cent. per annum, until paid. The penalty to go to the National Association.

RULE 4. *How Many to Enter.* In all purses, three or more entries are required, and two to start, unless otherwise specified.

RULE 5. *Horses to be Eligible when Entries Close* A horse shall not be eligible to start in any race, that has beaten the time advertised, prior to the closing of the entries for the race in which he is entered.

Horses shall not be eligible if the time specified has been beaten by them at a greater distance; that is, a horse having made two miles in five minutes is eligible for a 2.30 race, but not eligible for a race slower than that time.

RULE 6. *Name and Description of Each Horse Required.* An accurate and satisfactory description of each entry will be required, and shall be in the following form, to wit:

Color. The color and marks shall be accurately given.

Sex. It shall be distinctly stated whether the entry be a stallion, mare or gelding, and the names of the sire and dam shall be given when known.

Name of Horse. Every horse shall be named, and the name correctly and plainly written in the entry; and if the horse has trotted in a race under a different name within two years, such former name or names must be given. If a horse has trotted in any race, without a name, mention must be made in the entry of a sufficient number of his or her most recent performances, to enable persons interested to identify the horse; provided that it shall not be necessary to furnish any one association or proprietor with the same record the second time. In entries and nominations hereafter made, the words "No name" shall not be received as a name. Neither shall such descriptive words as "bay horse," "grey mare," etc., be allowed as names.

A horse having once been named, shall not again start in a race on any course in the United States or Canadas, without a name or under a different name, unless the foregoing provisions have been complied with.

Double Teams. In all double-team races, the entry must contain the name and description of each horse, in the manner provided for entry of single horses.

RULE 7. *Owner's Name and Address.* The post office address in full of the person or persons in whose name an entry is made, and if he or they be not the owner, then that of the owner or owners also, must accompany each nomination.

RULE 8. *Entries that Cannot Start.* As many horses may be entered by one owner, or as many horses trained in the same stable as may be desired, but only one that has been owned or controlled in whole or in part by the same person or persons, or trained in the same stable

within ten day previous to the race, can start in any race or heats.

RULE 9. *No Purse for a "Walk Over."* No purse will be given for a "walk over," but in cases where only one of the horses entered for any premium shall appear on the course, he shall be entitle to his own entrance money and to one-half of the entrance money received from all other horses entered for said premium.

RULE 10. *In Case of Death Engagements Void.* All engagements are void upon the decease of either party or horse, so far as they shall affect the deceased party or horse; but forfeits or matches made play or pay, shall not be affected by the death of a horse.

RULE 11. *Match Races.* In all match races these rules shall govern, unless the contrary be expressly stipulated and assented to by the club, association, or proprietors of the course over which the race is to come off.

RULE 12. *When Matches become Play or Pay.* In all matches made to come off over any of these courses, the parties shall place the amount of the match in the hands of the stakeholder one day before the event, (omitting Sunday) is to come off, at such time and place as the club, association or proprietor, upon application may determine, and the race shall then become play or pay.

RULE 13. *Purse or Stake Wrongfully Obtained.* A person obtaining a stake or purse through fraud, shall return it to the Treasurer on demand within one year, or be punished as follows: He, together with all the parties interested, and the horse or horses, shall be expelled until such demand is complied with, and such stake or purse shall be awarded to the party justly entitled to the same.

RULE 14. *Fraudulent Entries, or Meddling with Horses.* Any person found guilty of dosing or tamper-

ing with any horse, or of making a fraudulent entry of any horse, or of disguising a horse with intent to conceal his identity, or being in any way concerned in such a transaction, shall be punished by the forfeiture of entrance money and expulsion; and any horse that shall have been painted or disguised, to represent another or a different horse, or shall have been entered in a purse in which he does not belong, shall be expelled.

RULE 15. *Reward.* A reward of $50 will be paid to the person who shall first give information leading to the detection and conviction of any fraudulent entry and the parties thereto, to be paid out of the funds of the National Association for the Promotion of the Interests of the American Trotting Turf, by the Treasurer, upon the decision and order of the Board of Appeals; *provided*, that this shall not be construed to extend to courses outside of this Association.

RULE 16. *Protests.* Protests may be made verbally before or during a race, and shall be reduced to writing, and shall contain at least one specific charge and a statement of the evidence upon which it is based, and shall be filed with the Judges, Association or proprietor before the close of the meeting. The Judges shall in every case of protest demand that the rider or driver and the owner or owners, if present, shall immediately testify under oath, in the manner hereinafter provided; and in case of their refusal to do so, the horse shall not be allowed thereupon to start or continue in that race, but shall be considered and declared ruled out, with forfeit of entrance money.

But if they do comply and take the oath, as herein required, unless the Judges find evidence to warrant excluding the horse, they shall allow him to start, or continue in the race, under protest, and the premium, if any is won by that horse, shall be retained a sufficient length of time (say three weeks,) to allow the parties interested a chance to sustain the allegations of the protest, and all outside bets on such horse shall be held in abeyance

pending the decision of such protest, and the Judges shall waive the application of a distance as to all other horses in any heat which such protested horse shall win. And when a protest is presented, before or during a race and the parties refuse to make the prescribed oath, if the Judges believe the refusal is designed to favor a fraud, they may require the horse, under protest, to start or continue in the race.

Any person found guilty of protesting a horse falsely and without cause, or merely with intent to embarrass a race, shall be punished by a fine not exceeding $100, or by suspension not to exceed one year, or by expulsion.

When a protest has been duly made, or any information lodged with the Judges in support of such a protest, alleging any improper entry or fraudulent act such as shall be punishable under these rules, the same shall not be withdrawn or surrendered before the expiration of three weeks, except upon the decision of the association or proprietor of the course upon which such protest or information was produced; and if any association or proprietor shall permit such a withdrawal of protest or information with a corrupt motive to favor any party who shall be affected by the same, the association or proprietor guilty of this impropriety, if convicted thereof by or before the board of appeals, shall be expelled from all connection with the National Association.

Associations or proprietors shall be warranted in retaining the premium of any horse in the manner herein mentioned, if at any time before it is paid they shall receive information in their judgment tending to show fraud.

The oath required in answer to protest, shall be in the following form, to wit:

I, ... , of . . . . . , in the county of . . . . . , State of . . . . . , on oath depose and say, that I am the . . . . . of the . . . . . called . . . . . the same entered in a purse for horses that have never trotted better than . . . . . minutes and . . . . . seconds, to be trotted this

day on this course, and the same that has been protested, and to which potest this affidavit is in answer, hereby declare and affirm that to the best of my knowledge and belief said before-mentioned horse is eligible to start or compete in the race aforesaid, according to the rules of this course; and that I fully believe all the provisions and conditions required in the rules and regulations for the government of trials of speed over this course were fully and honestly complied with in making the entry aforesaid.

Given under my hand, at . . . . . , this . . . . . day of . . . . . , A. D., 187 . .

. . . . . .

Subscribed and sworn to before me, this . . . . . day of . . . . . , A. D., 187 . .

. . . . . .

Justice of the Peace.

[NOTE.—In the absence of a Justice of the Peace, if this oath be administered by an officer of the association, or one of the Judges of the race, it will be considered sufficient for the purposes of the National Association.]

RULE 17. *When Horses Shall Not be Drawn.* No person shall draw his horse after said horse has appeared on the track—saddled or harnessed—after having been summoned to prepare for the race, or during a race, except by permission of the Judges, under penalty of being expelled.

RULE 18. *Power of Postponement.* In case of unfavorable weather, or other unavoidable causes, each association or proprietor shall have power to postpone to a future time all purses or sweepstakes, or any race to which they have contributed money, upon given notice thereof.

RULE 19. *No Trotting After Dark.* No heat shall

be trotted when it is so dark that the horses cannot be plainly seen by the Judges from the stand, but all such races shall be continued by the Judges to the next fair day, omitting Sunday, at such hour as they shall designate.

In all matches and stakes, the above rule shall govern, unless otherwise especially agreed between the parties and the association or proprietors.

RULE 20. *Weights and Weighing.* Every horse starting for purse, sweepstakes, or match, in any trotting or pacing race, shall carry, if to wagon or sulky, 150 lbs., exclusive of harness; and if under the saddle, 145 lbs; the saddle and whip only to be weighed with the rider.

Riders and drivers shall weigh in the presence of one or more of the Judges previous to starting for any race, and, after each heat, shall come to the starting stand and not dismount or leave their vehicle without permission of the Judges, and those who are deficient in bodily weight shall be reweighed after each heat. Any rider or driver not bringing in his required weight shall be distanced, unless such decision shall be deemed to favor a fraud. But a rider or driver thrown or taken by force from his horse or vehicle, after having past the winning post, shall not be considered as having dismounted without permission of the Judges, and if disabled may be carried to the Judges' stand to be weighed, and the Judges may take the circumstances into consideration and decide accordingly. And the riders or drivers who shall carry during the race and bring home with them the weights which have been approved, or announced correct and proper by the Judges, shall be subject to no penalty for light weight in that heat, provided the Judges are satisfied the mistake, or fault, was their own, and that there has been no deception on the part of the rider or driver who shall be deficient in weight; but all parties thereafter shall carry the required weight.

RULE 21. *Handicaps and Miscellaneous Weights.* In matches or handicaps, where extra or lesser weights are to be carried, the Judges shall carefully examine and ascertain before starting, whether the riders, drivers or vehicles are of such weights as have been agreed upon or required by the match or handicap, and thereafter the riders and drivers shall be subject to the same penalties and conditions as if they were to carry the weights prescribed by the rules.

RULE 22. *When Riders and Drivers are Overweight.* If the bodily weight of any rider or driver shall be found to exceed that which is prescribed in the rules, or that which is required by the conditions of the race, and the overweight shall exceed twenty pounds, it shall be announced from the stand, and if not, the Judges shall have power, if, in their belief such extra weight was imposed on the horse for an improper or fraudulent purpose, to substitute another rider or driver of suitable weight ,and if they believe the horse has been prejudiced in the race by such overweight, he shall not be allowed to start again or continue in the race, and all outside bets on such horse shall be declared off. [See also Rule 28.]

A horse prevented by this rule from continuing in the race, shall not be distanced, but *ruled out.*

RULE 23. *Length of Whip.* Riders and drivers will be allowed whips not to exceed the following lengths: For saddle horses, 2 ft. 10 in.; sulkies, 4 ft. 8 in.; wagons, 5 ft. 10 in.; double teams, 8 ft. 6 in.; tandem teams and four-in hand, unlimited; snappers, not longer than three inches, will be allowed in addition to the foregoing measurement.

RULE 24. *Judges' Stand.* None but the Judges of the race in progress, and their assistants, shall be allowed in the Judges' stand during the pendency of a heat, except members of the board of appeals.

RULE 25. *Selection of Judges.* [See also Art. 13 of By-Laws.] In every exhibition or race, over any course represented in said National Association, each course for itself, through the proprietor or association controlling the same, shall choose or authorize the selection of three (3) competent Judges, for the day or race, who shall understand the rules of said National Association, and shall rigidly enforce the same; and all their decisions shall be subject to and in conformity with said rules. Any person having any interest in, or any bet dependent upon the result of a race, or having any interest in either of the horses engaged therein, shall thereby be disqualified and restricted from acting as a Judge in that race. And if any person who is thus disqualified shall intentionally and deceptively violate this restriction, he shall, upon conviction thereof by or before the board of appeals, be adjudged guilty of a dishonorable act, for which he shall be expelled from every course represented in said National Association.

RULE 26. *Authority of Judges.* The Judges of the day or race shall have authority, while presiding, to appoint distance and patrol Judges and Timers, to inflict fines and penalties, as prescribed by these rules; to determine all questions of fact in any way relating to the race over which they preside; to decide respecting any matters of difference between parties to the race, or any contingent matter which shall arise, such as are not specifically provided for in these rules; but all their decisions shall be in strict conformity with these rules, or with the principles thereof.

They shall have entire control over the horses about to start, and the riders or drivers and assistants of the horses, and authority to punish by a fine not exceeding $100, or by suspension or expulsion, any such person who shall refuse to obey their orders.

RULE 27. *Distance and Patrol Judges.* In all races of heats there shall be a distance Judge appointed by the Judges of the race or by those in authority, who

shall remain in the distance stand during the heats, and immediately after each heat shall repair to the Judges' stand, and report to the Judges the horse or horses that are distanced, and any act of foul or improper conduct, if any has occurred under his observation.

Patrol Judges may be similarly appointed, and it shall be their duty to repair in like manner to the Judges' stand, and report any act of foul or improper conduct, if any has occurred under their observation.

RULE 28. *Powers and Duties of Judges.* The Judges shall be in the stand fifteen minutes before the time for starting the race; they shall weigh the riders or drivers, and determine the positions of the horses, and inform each rider or driver of his place, before starting; they may require the riders and drivers to be properly dressed; they shall be prepared to take the time of each heat in the race, and they may appoint some suitable person or persons to assist them in that respect, and the time so taken shall be recorded and announced in conformity with these rules. [See also Rules 39 and 40, and Art. 13 of By-Laws.] The Judges shall ring the bell or give other notice ten minutes previous to the time announced for the race to come off, which shall be notice to all parties to prepare for the race at the appointed time, when all the horses must appear at the stand, ready for the race, and any rider or driver failing to obey this summons, may be punished by a fine not exceeding $100, or his horse may be ruled out by the Judges and considered drawn; [but in all stakes and matches a failure to appear promptly at the appointed time, shall render the delinquent party liable to forfeit.]

The result of a heat shall not be announced until the Judges are satisfied as to the weights of the riders or drivers, and sufficient time has elapsed to receive the reports of the distance and patrol Judges. The Judges shall not notice or consider complaints of foul from any person or persons, except the distance and patrol Judges appointed by themselves or by those in authority, and from owners, riders or drivers in the race.

If the Judges believe that a horse is being or has been "pulled," or has been ridden or driven in other respects improperly, with a design to prevent his winning a heat which he was evidently able to win, and that such act was done, on the part of the rider or driver for the purpose of perpetrating or aiding a fraud, they may declare that heat void, and they shall have power to substitute a competent and reliable driver or rider for the remainder of the race; and if the result of the succeeding heat or heats shall confirm their belief, the rider or driver so removed shall be punished by suspension or expulsion. And, at the close of the race, if they are warranted, under the foregoing circumstances, in deciding that such fraudulent conduct has changed the result of the race to the prejudice of innocent parties, they shall declare all outside bets "off," and if the owner or person or persons controlling the offending horse shall be a party or parties to such fraud, he or they shall be punished by expulsion. [See also Rules 22 and 48.]

RULE 29. *Starting and Keeping Positions.* No rider or driver shall cause unnecessary delay after the horses are called up, either by neglecting to prepare for the race in time, or by failing to come for the word, or otherwise; and in scoring, if the word is not given, all the horses in the race shall immediately turn, at the tap of the bell or other signal given, and jog back for a fresh start.

When the Judges are prevented from giving a fair start by a horse or horses persistently scoring ahead of others, or being refractory, or from any other fault of either horse, rider or driver, they may, after a reasonable time, give the word without reference to the position of the faulty horse or party, or they may give the faulty ones any position they think proper to facilitate the start.

If these requirement are not complied with on the part of any rider or driver, the Judges may not only start the race, or give the word without regard to the absence or position of the offending party or parties, but the

offender may be punished by a fine not exceeding $100, or by suspension not to exceed one year.

In all cases, the word shall be given from the Judges' stand, and in no instance shall a standing start be given.

When, through any fault of either horse, rider or driver, the Judges are prevented from giving a fair and prompt start, they shall warn the faulty party of the penalties to which they are subject, and if such warning is not heeded, they shall rigidly enforce said penalties.

The horse winning a heat shall take the pole (or inside position) the succeeding heat, and all others shall take their positions in the order in which they came home in the last heat. When two or more horses shall make a dead heat, the horses shall start for the succeeding heat in the same positions they occupied at the finish of the dead heat. In coming out on the home stretch, the foremost horse or horses shall keep the positions first selected, or be liable to be distanced; and the hindmost horse or horses, when there is sufficient room to pass on the inside or anywhere on the home stretch, without interfering with others, shall be allowed to do so, and any party interfering to prevent him or them shall be distanced. If a horse, in attempting to pass another on the home stretch, should at any time cross or swerve, so as to impede the progress of a horse behind him, he shall not be entitled to win that heat.

Although a leading horse is entitled to any part of the track, except after selecting his position on the home stretch, he shall not change from the right to the left, or from the inner to the outer side of the track, during any part of the race, when another horse is so near him that in altering his position he compels the horse behind him to shorten his stride, or cause the rider or driver of such other horse to pull him out of his stride; neither shall any horse, rider or driver cross, jostle, or strike another horse, rider or driver, nor swerve or do any other thing that impedes the progress of another horse; nor shall any horse, in passing a leading horse, take the track of the other horse so soon after getting the lead as to cause the horse passed to shorten his stride.

In any heat, wherein there shall be a violation of any of these restrictions, the offending horse shall not be entitled to win the heat, and he shall be placed behind all other horses in that heat. And if the impropriety was intentional on the part of the rider or driver, the offending horse may be distanced, and the rider or driver shall be suspended or expelled. [See also Rule 48.]

RULE 30. *Horses Breaking.* When any horse or horses break from their gait in trotting or pacing, their riders or drivers shall at once pull them to the gait in which they were to go the race, and any party refusing or failing to comply with this requirement, if he come out ahead, shall lose the heat, and the next best horse shall win the heat, and whether the breaking horse come out ahead or not, all other horses shall be placed ahead of him in that heat, and the Judges shall have discretionary power to distance the offending horse or horses, and the rider or driver may be punished by a fine not to exceed $100, or by suspension not exceeding one year. Should the rider or driver comply with this requirement, and the horse should gain by a break, twice the distance so gained shall be taken from him at the coming out, but this provision must not be so construed as to shield any trotting or pacing horse form punishment for running. In case of any such horse repeatedly breaking, or running or pacing while another horse is trotting, or so continuing in a run or pace as to violate the first requirement in this rule, the Judges shall punish the horse so breaking, running or pacing, by placing him last in the heat, or by distancing him. A horse breaking at or near the score, shall be subject to the same penalty as if he broke on any other part of the track.

RULE 31. *Relative to Heats and Horses Eligible to Start.* In heats, one, two, three or four miles, a horse not winning one heat in three, shall not start for a fourth, unless such horse shall have made a dead heat. In heats best three in five, a horse not winning a heat in five shall not start for a sixth, unless said horse shall have made a

dead heat. But where ten or more horses start in a race every horse not distanced shall have the right to compete until the race is completed, subject, however, to all other penalties in these rules.

RULE 32. *Dead Heats.* A dead heat shall be counted in the race, and shall be considered a heat which is won by the horses making it, but undecided between them, and it shall be considered a heat that is lost by all the other horses contending therein; and the time made in a dead heat shall constitute a record for each horse making such dead heat; and only those horses shall start for the next heat that would have been entitled had the heat been won by either horse making the dead heat. A horse prevented from starting by this rule shall not be distanced, but ruled out.

RULE 33. *Time between Heats.* The time between heats shall be twenty minutes for mile heats; and for mile heats, best 3 in 5, twenty-five minutes; and for two mile heats, thirty minutes; for three mile heats, thirty-five minutes; and should there be a race of four mile heats, the time shall be forty minutes.

After the first heat the horses shall be called five minutes prior to the time of starting.

RULE 34. *Time Allowed in Case of Accidents.* In case of accidents, ten minutes shall be allowed, but the Judges may allow more time when deemed necessary and proper.

RULE 35. *Fraudulent Collision and Break Down.* In case of collision and breakdown, the party causing the same, whether wilfully or otherwise, shall be distanced; and if the Judges find that it was occasioned designedly and to aid fraud, the driver in fault shall be forthwith suspended or expelled, and his horse shall be distanced; but if necessary to defeat fraud the Judges may direct the offending horse to start again.

No horse but the offending one shall be distanced in

such a heat except for foul driving. The Judges in a concluding heat finding that a collision involved a fraudulent object, may declare that heat void. [See also Rule 48.]

RULE 36. *Placing Horses.* A horse must win a majority of the heats which are required by the conditions of the race to be entitled to the purse or stakes, unless such horse shall have distanced all competitors in one heat, but whenever a horse shall have distanced all competitors in one heat the race is concluded, and the winner shall receive the entire purse and stakes.

When more than one horse remains in the race, entitled to be placed at the finish of the last heat, the second best horse shall receive the second premium, if there be any; and if there be any third or fourth premium, &c., for which no horse has won and maintained a specific place, the same shall go to the winner.

The foregoing provisions shall always apply, in such cases, unless otherwise stated in the published conditions of the race.

In deciding the rank of horses other than the winner, as to second, third and fourth places, &c., to be assigned among such as remain in the race, entitled to be placed at the conclusion of the last heat thereof, the several positions which have been assigned to each horse so contending shall be considered as to every heat in the race —that is, horses having won two heats better than those winning one: a horse that has won a heat better than a horse only making a dead heat; a horse winning one or two heats and making a dead heat, better than one winning an equal number of heats, but not making a dead heat; a horse winning a heat or making a dead heat and not distanced in the race, better than a horse that has not won a heat or made a dead heat; a horse that has been placed "second" twice, better than a horse that has been placed "second," only once, &c.

When two or more horses shall be equal in the race at the commencement of a final heat thereof, they shall rank as to each other as they are placed in the decision of such final heat.

In case these provisions shall not give a specific decision as to second and third money, &c., the Judges of the race are to make the awards according to their best judgment, but in conformity with the principles of this rule.

RULE 37. *Distances.* In races of mile heats 80 yards shall be a distance. In races of two mile heats 150 yards shall be a distance. In races of three mile heats 220 yards shall be a distance. In races of mile heats best 3 in 5, 100 yards shall be a distance. But if any Association or Proprietor shall choose, they can provide, in heats of not over one mile, wherein eight or more horses contend, to increase the distance one half, in which case such change shall be stated in the published conditions of the race, before entry.

All horses whose heads have not reached the distance-stand as soon as the leading horse arrives at the winning post shall be declared distanced, except in cases otherwise provided for, or the punishment of the leading horse by setting him back for running, when it shall be left to the discretion of the Judges.

A distanced horse is out of the race, and if in any heat one horse shall distance all competitors the race will then be completed, and the winner shall be entitled to the entire purse and stakes, unless otherwise stipulated in the published conditions of the race.

RULE 38. *Rank between Distanced Horses.* Horses distanced in the first heat of a race shall be equal, but horses that are distanced in any subsequent heat shall rank as to each other in the order of the positions to which they were entitled at the start of the heat in which they are distanced.

RULE 39. *Time and its Record.* In every public race the time of each heat shall be accurately taken and placed in the record, and upon the decision of each heat the time thereof shall be publicly announced by the Judges, except as provided in these rules concerning

those heats which are "taken away from leading horses."

It shall be the duty of the Judges of the race to take the time as aforesaid, or to appoint some suitable person or persons to assist them in that respect, and no unofficial timing shall be recognized or admitted to the record. [See also Rule 40.]

RULE 40. *Two Leading Horses to be Separately Timed.* The two leading horses shall be separately timed, and if the heat is awarded to either, his time only shall be announced and be a record. In case of a dead heat, the time shall constitute a record for the horses making the dead heat; and if for any other cause the heat is not awarded to either of the leading horses, it shall be awarded to the next best horse, and no time shall be given out by the Judges or recorded against either horse; and the Judges may waive the application of the rule in regard to distance in that heat except for foul riding or driving.

RULE 41. *Fraudulent Suppression of Time.* In any public race if there shall be any intentional suppression or misrepresentation in either the record or the announcement of the time of any heat in the race, procured through any collusive arrangement between the Judges or Timers and the owner of the winning horse or his driver or other authorized agent, it shall be fraudulent. And any horse winning a heat or making a dead heat wherein there was such a fraudulent suppression of time together with the parties implicated in the fraud, shall be expelled.

RULE 42. *A Public Race.* Any contest for purse, premium, stake or wager, on any course and in the presence of a Judge or Judges, shall constitute a public race.

RULE 43. *When Time Becomes a Bar.* Time made in single or double harness at fairs and on any track,

whether short or not, shall constitute a bar; but time made under the saddle shall not be a bar in harness or wagon races.

RULE 44. *Time of "Trotting Horse with a Running Mate" no Bar.* A race wherein a trotting horse goes with a running mate shall not create a record for time as a trotting performance.

RULE 45. *Complaints by Riders or Drivers.* All complaints by riders or drivers, of any foul riding or driving, or other misconduct, must be made at the termination of the heat, and before the rider or driver dismounts or leaves his vehicle by permission of the Judges.

RULE 46. *Decorum.* If any owner, trainer, rider, driver or attendant of a horse, or any other person, use improper language to the officers of the course or the Judges in a race, or be guilty of any improper conduct, the person or persons so offending shall be punished by a fine not exceeding $100, or by suspension or expulsion. [See also Rule 48.]

RULE 47. *Loud Shouting.* Any rider or driver guilty of loud shouting, or making other unnecessary noise, or of making improper use of the whip, during the pendency of a heat, shall be punished by a fine not to exceed $25, or by suspension during the meeting.

RULE 48. *Fouls.* If any act or thing shall be done by any owner, rider, driver, or their horse or horses, during any race or in connection therewith, which these rules define or warrant the Judges in deciding to be foul, and if no special provision is made in these rules to meet the case, the Judges shall have power to punish the offender by a fine not to exceed $100, or by suspension or expulsion. And in any case of foul riding or driving, they shall distance the offending horse, unless they believe such a decision will favor a fraud. The term "foul"

shall be construed to apply to riding or driving contrary to rule, to any act of a fraudulent nature, and to any unprincipled conduct such as tends to debase the character of the trotting turf in the estimation of the public [See also Rules 28, 29, 35, 46 and 47.]

RULE 49. *Fines.* All persons who shall have been fined under these rules, unless they pay the fines imposed in full on the day of assessment, shall be suspended until they are so paid or deposited with the Treasurer of said National Association.

All fines which shall be paid to the association or proprietor on whose grounds they were imposed shall by them be paid to the Treasurer of the National Association upon demand.

RULE 50. *No Compromise of Penalties.* In no case shall there be any compromise in the manner of punishment where the rules express or provide what the penalty shall be, but the same shall be strictly enforced.

RULE 51. *Suspensions and Expulsions.* Whenever the words suspended or suspension occur in these rules, if applied to a horse, they shall be construed to mean a disqualification during the time of suspension, to enter or compete in any race to be performed on the course of the association or proprietor; and if applied to a person, they shall be construed to mean a conditional withholding of all right or privilege to make an entry, or to ride, drive, train or assist on the course and grounds of the association or proprietor. If no limit is fixed in an order of suspension, and none is prescribed in the rules applicable to the case, the punishment shall be considered as limited to the season in which the order was issued.

Whenever the words expelled or expulsion occur in these rules, they shall be construed to mean unconditional expulsion and disqualification from any participation in the privileges and uses of the course and grounds of the association or proprietor. And no penalty of expulsion shall be removed or modified, except by the order or upon the approval of the Board of Appeals.

Whenever the penalty of suspension or expulsion has been imposed on any horse or person on the grounds of any association or proprietor holding membership in said National Association, written or printed notice thereof shall immediately be forwarded to the Secretary of said National Association, stating the offense and the character of punishment, who shall at once transmit the information to each associated course or member; and thereupon the offender thus punished shall suffer the same penalty and disqualification with each association and proprietor holding membership in said National Association.

RULE 52. *Right of Appeal.* Any person who has been subjected to either of the penalties of suspension, expulsion, or a fine, by the decision of the Judges of a race, can appeal from such decision to the association or proprietor, upon whose grounds the penalty was imposed, and from their decision can appeal to the Board of Appeals; *provided*, that where the penalty was a fine, it shall have been previously paid. And all decisions and rulings of the Judges of any race, and of the several associations and proprietors belonging to said National Association, may be appealed to the Board of Appeals, and shall be subject to review by said board, upon facts and questions involving the proper interpretation and application of these rules, and their decisions shall be final; *provided*, that parties to be affected thereby, shall be notified as the board shall direct, of a time and a place when such appeal will be acted on by the board.

Provided further, if the appeal relate to the decision of a race, immediate notice shall have been given to the Judges of the race of the intention so to appeal. All other appeals must be taken within one week from the announcement of the decisions appealed. Any person who shall appeal from any order suspending him or his horse for non-payment of entrance money or a fine, may deposit the amount claimed with the Treasurer of said National Association, who may thereupon issue a certificate or notice temporarily re-instating or relieving the

party and his horse from such penalty, subject to the final action of the Board of Appeals.

RULE 53. *Age of a Horse—how reckoned.* The age of a horse shall be reckoned from the first day of January preceding the period of foaling.

RULE 54. *Colts and Fillies equally Eligible to Enter.* All colts and fillies shall be eligible alike to all premiums and stakes for animals of their age, unless specially excluded by the conditions imposed.

RULE 55. *A Green Horse.* A green horse is one that has never trotted or paced for premiums or money, either double or single.

RULE 56. *Races made and "No Hour Named."* All races shall be started at 3 o'clock, P. M., from the 1st day of April to the 15th day of September, and after that date at 2 o'clock, P. M., until the season closes, unless otherwise provided.

RULE 57. *Race made and no Distance Specified.* When a race is made and no distance specified, it shall be restricted to the following distances, viz.; one mile and a repeat; mile heats, best 3 in 5; 2 miles and repeat, or 3 miles and repeat, and may be performed in harness, to wagon, or under the saddle.

RULE 58. *Race made to "go as they please."* When a race is made to go as they please, it shall be construed that the performance shall be in harness, to wagon or under the saddle; but after the race is commenced no change shall be made in the mode of going.

RULE 59. *Race made to go "in Harness."* When a race is made to go in harness it shall be construed to mean that the performance shall be to a sulky.

RULE 60. *Matches made against Time.* When a

horse is matched against time it shall be proper to allow any other horse to accompany him in the performance, but not to be harnessed with or in any way attached to him.

In matches made against time, the parties making the match shall be entitled to three trials, unless expressly stipulated to the contrary, which trials shall be had on the same day—the time between trials to be the same as the time between heats in similar distances.

RULE 61. *Horses sold with Engagements.* The seller of a horse sold with his engagements has not the power of striking him out. In case of private sale, the written acknowledgement of the parties that the horse was sold with engagements is necessary to entitle the buyer to the benefit of this.

A true copy from the record,

Attest—

GEO. W. SMITH,

Secretary

BETTING RULES

By vote of the National Association, at the Annual Meeting held at Buffalo, New York, on the first Wednesday of February, 1871, a special committee was appointed to revise the BETTING RULES, and said committee having reported the following rules, they are accordingly adopted to control all pools and bets laid upon any trotting or pacing event which shall be subject to the government of the rules of said National Association:—

No. 1. All pools and bets must follow the main stakes, purse or other prize, as awarded by the decision of the judges, except in cases where the horse that comes in first is found to be disqualified, or the bets are declared off for fraud or collusion.

No. 2. If a race is postponed, it shall not affect the pools or bets that may have been made on it. They shall stand until the race comes off, unless the contrary shall be agreed on between the parties betting; provided the race takes place within five days of the time first named; after which time all bets and pools are drawn, unless made play or pay.

No. 3. When any change is made in the conditions of a race, all pools and bets made previous to the announcement of the change shall be null and void.

No. 4. When a bet is made on one horse against the field, he must start or the bet is off, and the field is what starts against him; but there is no field unless one start against him.

No. 5. In pools and betting, the pool stands good for all the horses that start in the race; but for those horses that do not start, the money must be returned to the purchaser.

No. 6. In races made play or pay, outside bets are not play or pay unless so made by the parties.

No. 7. All bets are void on the decease of either party, but in case a horse should die, play or pay bets made on him stand.

No. 8. If a bet is made on any number of straight heats, and there is a dead heat made, the heats are not straight, and the party betting on straight heats loses.

No. 9. If in any case the judges declare a heat null and void, it does not affect the bets as in case of a dead heat as to winning in straight heats.

No. 10. When a race is coming off, and a party bets that a heat will be made in two minutes and thirty seconds (2.30) and they make two thirty (2.30) or less, he would win. If he bets they will beat two minutes and thirty seconds, (2.30,) and they make exactly two thirty (2.30,) he loses; but if he takes two minutes and thirty seconds (2.30) against the field, and they make exactly two thirty (2.30) it is a tie, or draw bet. All time bets to be decided accordingly.

No. 11. In a double event—where there is no action on the first race in order, in consequence of forfeit or other cause, the bet is off; but where there is an action on the bet, and the party betting on the double event shall have won the first, the bet shall then stand as a play or pay bet for the second event.

No. 12. If a bet should be made during the contest of a heat that a named horse will win that heat, and he makes a dead heat, the bet is drawn; but if after the horses have passed the score, a party bets that a certain named horse has won the heat, and the judges declare it a dead heat, the backer of the named horse loses.

No. 13. In races between two or more horses, of a single dash at any distance, which result in a dead heat, it is a draw between the horses making the dead heat, and bets between them are off, and if it is a sweepstakes, the

money of the beaten horses is to be devided between the horses making the dead heat.

No. 14. When a better undertakes to place the horses in a race, he must give a specified place as first, second, third and so on. The word "last" shall not be construed to mean "fourth and distanced," if four start, but "fourth" only and so on. A distanced horse must be placed "distanced."

No. 15. Horses shall be placed in a race and bets decided as they are placed in the official record of the day; provided that where a horse comes in first and it is afterwards found that he was disqualified for fraud, the bets on him shall be null and void, but pool sellers and stake holders shall not be held responsible for moneys paid by them under the decision of the judges of the race. [See article 13 of By-Laws.]

No. 16. Bets made during a heat are not determined until the conclusion of the race, if the heat is not mentioned at the time.

No. 17. Either of the bettors may demand stakes to be made, and, on refusal, declare the bet to be void.

No. 18. Outside bets cannot be declared off on the course unless that place was named for staking the money, and then it must be done by filing such declaration in writing with the judges, who shall read it from the stand before the race commences.

No. 19. Bets agreed to be paid or received, or bets, agreed to be made or put up elsewhere than at the place of the race, or any other specified place, cannot be declared off on the Course.

No. 20. Bets on horses disqualified and not allowed to start are void, unless the bets are play or pay.

No. 21. A bet cannot be transferred without the consent of parties to it, except in pools.

No. 22. When a bet is made on a horse's time, it

shall be decided by the time made in a public race; he going single and carrying his proper weight.

No. 23. When a horse makes time on a short track, it shall not constitute a record for the decision of bets.

No. 24. Horses that are distanced or drawn at the conclusion of a heat are beaten in the race by those that start afterward. A horse that is distanced in a heat is beaten by one drawn at the termination of the same heat.

No. 25. When a man lays odds and intends to take the field against a single horse, he must say so, and the other party will choose his horse. When a man undertakes to name the winner, whether he bets odds or takes odds, he must name some one horse.

No. 26. All bets relate to the purse, stake or match, if nothing to the contrary is specified at the time of making the bet.

No. 27. Parties wishing all the horses to start for a bet, must so name it at the time the bet is made.

No. 28. When the judges declare a heat null and void, all bets on that heat shall stand for decision on the next heat.

No. 29. All pools and bets shall be governed and decided by these rules, unless a stipulation to the contrary shall be agreed upon by the parties betting.

No. 30. Should any contingencies occur not provided for by these rules, the judges of the day shall decide them.

No. 31. When a horse which has not been sold in the pools wins the race, the best horse sold in the pools wins the money.

A true copy from the record,

Attest—

GEO. W. SMITH,

Secretary.

[EXTRACT]

BY-LAWS

OF THE

National Association for the Promotion of the Interests of the American Trotting Turf.

ARTICLE 12. *Duties of Members.* It shall be the duty of each member to see that the rules, regulations and by-laws of this Association are rigidly enforced upon their respective courses.

Members shall not allow their courses to be used for exhibitions of a character degrading to the public standing of the National Association, and they shall be held responsible for any violation of the rules of this Association.

They shall keep on file all letters, entries and communications relating to their respective courses, for future references.

They shall furnish each owner, trainer, rider or driver with a copy of the rules of this Association, if so requested, and shall have at least one copy posted in some conspicuous place in the Judges' stand for the convenience of the Judges.

ARTICLE 13. *Clerk of the Course.* It shall be the duty of each member to provide the services of a competent person to assist the Judges in each and every race upon their respective course, who shall be styled the Clerk of the Courses. He shall understand the rules of this Association, and be able to give any information in regard to them that may be required by the Judges.

He may assist in weighing riders or drivers, assigning the position of horses before the race; or other similar duties at the request of the Judges; and shall keep a book in which shall be recorded a description of the dress or colors of each rider or driver, and the weight carried; he shall note the time when a heat is finished, and shall notify the Judges, or ring the bell at the expiration of the time allowed between heats; he may assist the Judges in placing the horses at the finish of heat.

He shall record in a book to be kept for that purpose, an account of every heat, in the following form, to wit: First—all horses entered and the name of the riders or drivers; next, the starting horses and the positions assigned them; next, a record of each heat, giving the position of each horse at the finish, then the official time of each heat, and at the end, an official summary of the race, giving the drawn, distanced and ruled out horses, if any there be. He shall record all protests, fines, penalties and appeals. This book shall be signed by the Judges and shall constitute the official record.

ARTICLE 17. *Entries.* The hour for closing the entries of all purses or premiums offered by any of the associated courses shall be 9 o'clock, P. M. All letters or entries bearing postmark the date of closing, shall be eligible.

"GOING OVER THE WEIGHING-MACHINE." [illegible]